JPRS-WER-86-110

7 NOVEMBER 1986

West Europe Report

FBIS FOREIGN BROADCAST INFORMATION SERVICE

NOTE

JPRS publications contain information primarily from foreign newspapers, periodicals and books, but also from news agency transmissions and broadcasts. Materials from foreign-language sources are translated; those from English-language sources are transcribed or reprinted, with the original phrasing and other characteristics retained.

Headlines, editorial reports, and material enclosed in brackets [] are supplied by JPRS. Processing indicators such as [Text] or [Excerpt] in the first line of each item, or following the last line of a brief, indicate how the original information was processed. Where no processing indicator is given, the information was summarized or extracted.

Unfamiliar names rendered phonetically or transliterated are enclosed in parentheses. Words or names preceded by a question mark and enclosed in parentheses were not clear in the original but have been supplied as appropriate in context. Other unattributed parenthetical notes within the body of an item originate with the source. Times within items are as given by source.

The contents of this publication in no way represent the policies, views or attitudes of the U.S. Government.

PROCUREMENT OF PUBLICATIONS

JPRS publications may be ordered from the National Technical Information Service, Springfield, Virginia 22161. In ordering, it is recommended that the JPRS number, title, date and author, if applicable, of publication be cited.

Current JPRS publications are announced in Government Reports Announcements issued semi-monthly by the National Technical Information Service, and are listed in the Monthly Catalog of U.S. Government Publications issued by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Correspondence pertaining to matters other than procurement may be addressed to Joint Publications Research Service, 1000 North Glebe Road, Arlington, Virginia 22201.

JPRS-WER-86-110

7 NOVEMBER 1986

WEST EUROPE REPORT

CONTENTS

POLITICAL

DENMARK

Poll on Desirability of Leftist Coalition Government
(Asger Schultz; BERLINGSKE TIDENDE, 22 Sep 86) 1

Poll on Success of Government's Economic Policy
(Asger Schultz; BERLINGSKE TIDENDE, 4 Oct 86) 4

Problems of Social Democrats After Congress Viewed
(Solveig Rodsgaard; WEEKENDAVISEN, 12-18 Sep 86) 7

FEDERAL REPUBLIC OF GERMANY

Survey Showing Coalition Edge Seen as Misleading
(FRANKFURTER ALLGEMEINE ZEITUNG, 10 Sep 86) 12

PORTUGAL

Eanes Urges Policy of Political Alliances
(EXPRESSO, 13 Sep 86) 15

Contradictory Opinions on Possible PSD-PRD Alliance
(Various sources, various dates) 16

Alliance Seen Impossible, by Marcelo Rebelo de Sousa 16
Impossibility of Alliance Refuted, by Marcelo Curto 21
Alliance as Temporary Expediency, by Julio Santos 23

Crisis in CDS-PSD Relations Termed 'Unprecedented'
(Editorial; DIARIO DE NOTICIAS, 16 Sep 86) 25

Government's Foreign Policy Errors Listed
(Antonio Barreto; DIARIO DE NOTICIAS, 7 Sep 86) 27

Government Urged To Take Advantage of 'Favorable' Season Ahead
(Jose Miguel Judice; O DIABO, 16 Sep 86) 30

Azores Separatist Front Charges Colonialism
(DIARIO DE LISBOA, 9 Sep 86) 33

Azores Incident Complicates Political Situation
(O JORNAL, 5-11 Sep 86) 34

Mota Amaral Interviewed, by Jose Pedro Castanheira 34
Cavaco Silva's Refusal 36

SPAIN

Existence of Clandestine Civil Guard Union Revealed
(DIARIO 16, 12, 13 Aug 86) 38

Union Leader Discusses Objectives, by Alfonso Domingo 38
Response to Prime Minister's Statements, by Alfonso Domingo 40
HB Links GAL, Civil Guard Leader, by Antonio Herce 41

ECONOMIC

DENMARK/GREENLAND

Danish Delegation Views Greenland's Needs, Progress
(Jorgen Ullerup; AKTUELT, 22 Sep 86) 43

FEDERAL REPUBLIC OF GERMANY

Mid-, Long-Term Prospects for Aerospace Industry Analyzed
(Wolfgang Flume; WEHRTECHNIK, Jan 86) 47

ITALY

Montedison Signs Foreign Agreements, Expands Activity
(TECNOSINTESI MESE, Mar 86) 59

Accord With Czechoslovakia 59
Agreement With Poland 60
Composite Materials Expansion 61
Urea Production in China 61

PORTUGAL

Statistics Show Decline in Inflation
(O DIA, 12 Sep 86) 63

Improvement in Employment Situation Reported
(O DIA, 15 Sep 86) 64

Mozambican Debt Consolidation Planned Through Loan
(DIARIO DE NOTICIAS, 6 Sep 86) 65

Briefs
Loan to Mozambique 67
Ships for USSR 67

SWEDEN

Hungary Welcomes Expansion of Transport, Trade Ties
(Istvan Matko; MAGYAR HIRLAP, 16 Sep 86) 68

Trade Union Federation Heading for Identity Crisis
(Claes Leo Lindwall; DAGENS NYHETER, 14 Sep 86) 71

TURKEY

Status of Worker-Owned Firms in Government Program Reviewed
(DUNYA, 27 Aug 86) 75

FRG Oversight Agencies to 'Observe' Firms, by Levent Akbay 75
Worker-owned Foundry Firm Said To Be Profitable 76

MILITARY

BELGIUM

Retired General Responds to Criticism of Army
(Jef Segers; KNACK, 10 Sep 86) 77

FEDERAL REPUBLIC OF GERMANY

Combat Aircraft To Undergo Effectiveness Upgrading
(SOLDAT UND TECHNIK, Sep 86) 80

Program Goals Outlined, by Eberhard Eimler 80
F-4F Combat Effectiveness Upgrading, Klaus Zaepfel 81
Alpha Jet Capability Enhancement, by Peter Kothe 85
Tornado Combat Effectiveness Maintenance, by Arnold
Arnold Gassmann 89
Electronic Warfare, Reconnaissance Tornado, by
Helmut Binder 95
RF-4E Combat Effectiveness Upgrading 99

Luftwaffe General Views NATO Air Defense Requirements of 1990's
(Eberhard Eimler; FLUG REVUE, No 8, Aug 86) 106

SPAIN

Private Fallout Shelters Predominate in Catalonia
(LA VANGUARDIA, 4 Sep 86) 110

New Defense Cycle Reportedly Planned
(EL PAIS, 12 Sep 86) 112

Briefs
Fallout Shelters Said Lacking 113

ENERGY

SPAIN

Effect of Energy Plan on Consumption, Energy Sources Analyzed
(MERCADO, 5 Sep 86) 114

SWEDEN

Scholar Criticizes University Report on Nuclear Energy
(Olof Eriksson; DAGENS NYHETER, 22 Sep 86) 118

/9987

POLL ON DESIRABILITY OF LEFTIST COALITION GOVERNMENT

Copenhagen BERLINGSKE TIDENDE in Danish 22 Sep 86 p 5

[Article by Asger Schultz]

[Text] All of the talk about a "red" majority as an alternative to the present nonsocialist government has not resulted in a corresponding confidence in the ability of such a government, let alone in a belief that it may become a reality.

Irrespective of the declining popularity of the nonsocialist government, which is a reality, this government is considered better suited for safeguarding Denmark's economic policy than a Social Democratic, Socialist People's coalition government.

This appears from a poll that was carried through by the Gallup Institute to illustrate the reactions of the electorate to the debate of the summer on the possibilities of "a red majority." A representative section of the adult population, comprising approximately 1,000 respondents, was asked the following question:

"There has been much talk about a so-called red majority, i.e., a government composed of the Socialist People's Party and the Social Democratic Party. In your opinion, will such a government be better or worse for Denmark than the present nonsocialist government?"

The answers to the above question were as follows:

	Better	Same	Worse	No Opinion	Total
	%	%	%	%	%
Total	28	19	35	18	100
To the right of the Social Democratic Party	3	11	81	5	100
Social Democratic Party	54	20	8	18	100
To the left of the Social Democratic Party	65	18	6	11	100
Employed in private or public sector					
Private	23	18	43	16	100
Public	40	18	29	13	100

The relative majority (35 percent as against 28 percent) finds that it will be best for the country to keep the present nonsocialist government, at least if the alternative is a Social Democratic,Socialist People's Party coalition government. It can be no surprise that this view is overwhelmingly prevalent among nonsocialist voters, but it is worth noting that "only" a slight majority among Social Democratic voters (54 percent) finds a Social Democratic, Socialist People's Party coalition government better than the nonsocialist government.

It is also worth noting that employees within the public sector clearly advocate a Social Democratic, Socialist People's Party coalition government as opposed to employees within the private sector.

The economic policy is generally considered to be the strength of the nonsocialist government and the corresponding weakness of a "red majority." The following question was therefore asked:

"Which government do you find to be best suited to be in charge of the economic recovery?"

The answers to this question were as follows:

	Non-Socialist Government	Social Democratic, Socialist People's Party Coalition	No Opinion	Total
	%	%	%	%
Total	41	24	35	100
To the right of the Social Democratic Party	87	1	12	100
The Social Democratic Party ..	12	51	37	100
To the left of the Social Democratic Party	13	56	31	100
Employees within private or public sectors:				
Private	49	21	30	100
Public	37	37	26	100

The nonsocialist government is clearly preferred (41 percent as against 24 percent) to a Social Democratic, Socialist People's Party coalition to be in charge of the economic policy. "Only" half of the Social Democratic voters find a Social Democratic, Socialist People's Party coalition government better than the nonsocialist government.

Finally, the following question was asked:

"Disregarding your own desires, which government of the two possibilities do you believe to be most likely after the next election?"

The answers to the above question were as follows:

	Non-Socialist Government	Social Democratic, Socialist People's Party Coalition	No Opinion	Total
	%	%	%	%
Total	43	31	26	100
To the right of the Social Democratic Party	63	17	20	100
Social Democratic Party	30	50	20	100
To the left of the Social Democratic Party	34	53	13	100
Employees within private or public sectors:				
Private	51	27	22	100
Public	49	34	17	100

Even if it may not be regarded as an election prognosis, it is, nevertheless, striking that, not least against the background of the government's declining popularity, a clear relative majority (43 percent as against 31 percent) does not believe in a Social Democratic, Socialist People's Party coalition government after the next election. As mentioned above, these figures may not be regarded as an election prognosis for the very reason that the lack of confidence may equally well be a lack of confidence in the ability of the two parties to agree on a joint policy as a lack of confidence in their ability to achieve a joint majority.

Again, the nonsocialist voters are the most "optimistic," while approximately one third of the socialist voters expect a nonsocialist government after the election. It will also be seen from the poll that although employees within the public sector prefer a Social Democratic, Socialist People's Party coalition government, the clear majority among them regard a nonsocialist government as the most realistic outcome after the next election.

Reprinting subject to indication of BERLINGSKE TIDENDE and the Gallup Institute as sources.

7262
CSO: 3613/7

POLL ON SUCCESS OF GOVERNMENT'S ECONOMIC POLICY

Copenhagen BERLINGSKE TIDENDE in Danish 4 Oct 86 p 6

[Article by Asger Schultz]

[Text] On the whole, it may be said that the electorate takes a positive view of the economic policy pursued by the government. This applies with regard to the inflation rate, the employment situation and the interest rate. On the other hand, the electorate is not enthusiastic about the tight budgetary policy pursued by the government, as as far as the balance of payments deficit is concerned, the electorate views the government's efforts in this area as largely a failure.

This appears from a poll which was carried through by the Gallup Institute to elucidate more precisely the policy pursued by the government in a number of areas on which the attention has particularly focussed in the political debate.

A representative section of the adult population, comprising approximately 1,000 respondents, was, by way of introduction, asked the following question:

"The economic policy pursued by the nonsocialist government has aimed at improvements in a number of areas. The government has wanted to check the rate of inflation to ensure the country's competitiveness, it has wanted to increase the rate of employment, which is a goal in itself, it has wanted to lower the interest rate to make it easier for the business sector to procure capital. It has wanted to eliminate the budget deficit of the state by way of cutbacks, among other things, within the public sector, and, finally, it has wanted to eliminate the balance of payments deficit. I now want to ask you whether you find that the nonsocialist government has manged well, fairly well or not well in each of these areas?"

The answers to the five questions were as follows:

	Very Well	Fairly Well	Not Well	No Opinion	Total
	%	%	%	%	%
Inflation	24	38	23	15	100
Employment	24	40	27	9	100
Interest rate	25	39	17	19	100
Budget policy	15	26	41	18	100
Balance of payments	3	17	65	15	100

As will appear from the above, nearly two-thirds of the voters find that in the first three areas the government has pursued an acceptable policy. As far as the budget policy is concerned, the situation is somethwat more difficult in that equally many (41 percent) can respectively accept and not accept the government's budget surplus.

Economically, the balance of payments is quite obviously the government's Achilles heel. Two-thirds of the voters (65 percent) find that the government has "not done well," which means that the efforts and evaluations of the government in this area, in the opinion of the voters, will have to be regarded as a failure.

The outcome of a more detailed analysis was not surprisingly that the evaluations of the economic policy pursued by the government were greatly dependent upon the political affiliations of the voters. Socialist voters took a considerably more negative view of the government's economic policy than non-socialist voters, even if, in spite of everything, socialist voters, too, took a predominantly positive view of the government's results in the first three areas.

Equally interesting was perhaps the fact that the Social Democratic evaluations were practically identical with the evaluations of the rest of the socialist voters, viewed against the background of the pronounced disagreement that has surfaced between the Social Democratic Party and the Socialist People's Party in the very area of the economic policy.

Another interesting feature was the viewpoint of employees within the public sector on the budget policy pursued by the government. In this respect, the answers were as follows:

	Very Well	Fairly Well	Not Well	No Opinion	Total
	%	%	%	%	%
Budget policy: total	15	26	41	18	100
Employees within public sector	17	29	43	11	100
Employees within private sector	18	28	40	14	100

As appears, employess within the public sector did not take a more critical view of the tight budget policy pursued by the government than employees within the private sector, which, admittedly, is surprising.

Reprinting subject to indication of BERLINGSKE TIDENDE and the Gallup Institute as sources.

7262
CSO: 3613/7

POLITICAL DENMARK

PROBLEMS OF SOCIAL DEMOCRATS AFTER CONGRESS VIEWED

Copenhagen WEEKENDAVISEN in Danish 12-18 Sep 86 p 2

[Article by Solveig Rodsgaard; first paragraph is WEEKENDAVISEN introduction]

[Text] The Radical Liberals have turned a cold shoulder to the Social Democratic Party and Social Democrats are having a hard time finding their footing in relation to the Socialist People's Party [SF] even though on paper they have expressed a desire for an SDP-SF government. At the same time the Social Democrats must realize that the party's biggest problem is the leadership issue.

The Social Democrats are covering up their problems and failing to engage in an open discussion. That is the Radical Liberal assessment of the SDP congress in Alborg and this also makes it clear that the Radicals are not tempted to resume their former close cooperation with SDP. Therefore the only chance the Social Democrats will have for cooperation is with the left-wing parties.

Radical leader Niels Helveg Petersen stressed that it is not up to outsiders to interfere with any leadership problem SDP may have:

"The question of party leadership is a purely internal SDP affair. The rest of us must simply take a stand on the actual leader of the party, namely Anker Jorgensen. But we can certainly point out that at their congress the Social Democrats repeated an old party failing: they did not hold an open discussion on the party's overall line. The party program did not set any priorities either. The Social Democrats have failed to make their position clear and coherent and it is characteristic that SDP-SF cooperation was not clarified in any way even though this is a debate topic that the Social Democrats brought up themselves. The party deserves praise for moving in a constructive direction on the European question. But from a political point of view the Social Democrats are neglecting and failing to clarify the dilemmas on the political level as well as in relation to their own moves," said Niels Helveg Petersen.

The Radical characterization of the SDP congress suggests that it was a somewhat lackluster affair. There really was not much fighting spirit in evidence

and of course it did not improve matters when Sunday's Gallup poll in BERLINGSKE TIDENDE showed declining support for the Social Democrats. Not just in relation to the last poll but also compared to the election results in January 1984.

There was an appeal to the defecting voters in the statement issued by the congress: "The Social Democratic Party will intensify its effort to provide Denmark with a new government. We are issuing an invitation for open cooperation on this. The congress maintains its desire for an SDP-SF government if the two parties have a majority after an election. But Denmark can not get an energetic new government unless the Social Democrats receive increased support from the voters."

Leadership Problem

However the appeal does not hide the biggest problem facing SDP, namely the leadership problem. Many Social Democrats are so concerned about this that not much energy is left for the debate on the party's realistic bid to solve the political problems of the future. And there is also uncertainty about which line the party chairman will choose. But only a few people pulled themselves together enough to mention the subject in speeches at the congress even though there were rumors in part of the press in the days before the congress that a group of Folketing members led by former Housing Minister Erling Olsen were planning a coup to oust Anker Jorgensen. The alleged plans of the "Olsen gang" were the subject of lively discussion among delegates outside the congressional meeting chamber in Alborg Hall.

Many Social Democrats now strongly suspect that Erling Olsen himself launched the conspiracy plans which presumably went no further than the regular discussions that have taken place among many groups of Social Democratic members of Folketing on the leadership problem and possible solutions to it.

But at any rate the media debate prior to the congress led to a lid being put on the leadership debate at the congress. Deputy chairman Svend Auken was a party to this when he opened the debate on Sunday morning: "All the talk about personalities and internal matters has been detrimental. We and the Danish people are sick and tired of it. True Social Democrats want delegates who will fight for the party, not about it. That is also an important message from the SDP congress."

Mogens Lykketoft, a member of the same coffee club as Erling Olsen, approached the leadership problem in this way: "The variety and breadth of our party--the opportunity to choose between different nuances or wings--should be turned into a sales argument instead of a handicap. This can be done when our main line is clear and leadership matters are no longer a topic of discussion."

In spite of Svend Auken's suggestion, one delegate, Eva Lauritzen, refused to put a lid on the debate in the party: "We ought to be able to discuss a possible candidate for the chairmanship. The nonsocialists are discussing this, so why shouldn't we? Anker was picked out by Jens Otto Krag. I like

Anker and I am confident that after the debate is over he will select the right person."

In his concluding remarks to the congress Anker Jorgensen commented on her speech: "In my opinion a lid should not be placed on the discussion of personalities. These questions should be discussed in a friendly and objective way. When a president is up for election in the United States--there is no other comparison between these two processes, by the way--they go into who the candidates are in great depth. The day after a president is elected a new debate begins concerning who will succeed him. Why shouldn't we also be able to discuss this in Denmark and in our own party?"

But at the press conference after the congress Anker Jorgensen would not discuss the matter further. "I have no further comment on this. Period. I don't mind your asking about it, but I will not say anything."

So there has been no progress in clarifying the leadership problem. A quiet discussion in certain Social Democratic circles about dividing the leadership of the party into two posts, one a proper party chairmanship and the other a parliamentary leadership post, was also halted because it became clear that in that case Anker Jorgensen would be the parliamentary leader.

Therefore the Social Democrats are going into the new Folketing year and a future election campaign with a party chairman who knows that many people think he ought to bow out. As one Social Democrat said after he had a few days in which to recover from the congress: "For Schluter, Anker is a life insurance policy. He must do everything he can to keep Anker in this position."

Political Signals

Criticism of the Folketing group was also heard from several quarters at the congress because the delegates felt many members make conflicting statements. This is a feeling shared by Anker Jorgensen and he is intensely annoyed when a number of Folketing members make different statements on the same issue and thus create even more uncertainty about the party line. Anker Jorgensen made this comment on the criticism at the congress in his concluding remarks:

"The Folketing group should not keep quiet. But its members should try to say approximately the same thing." That led to a burst of applause and Anker Jorgensen went on: "Thank you for the applause. Our group deserves it. They don't clap when I tell them the same thing."

The debate on the different political signals coming from Folketing members received an extra dimension when the political statement from the congress was being prepared. The question of the Social Democratic stand on assuming government responsibility after the next election has been a frequent part of this summer's debate. Anker Jorgensen has said that the Social Democrats need more seats in order to form a government while Ritt Bjerregaard, for example, thinks the party should try to form a government in any case.

The draft for the congressional statement said among other things: "The congress maintains its desire for an SDP-SF government if the two parties have a majority after an election. But Denmark can not get a new government unless the Social Democrats receive increased support from the voters."

When a delegate said that this meant that if the Social Democrats did not win more seats in an election the party would back a Schluter government, the sentence was changed in the final congressional statement to: "But Denmark can not get an energetic new government unless the Social Democrats receive increased support from the voters."

Incidentally it attracted some attention that Anker Jorgensen did not mention SF at all by name in his political report which was delivered on the first day of the congress. And in his concluding remarks, which lasted for almost an hour, it was only in the very last minutes that Anker Jorgensen mentioned an SDP-SF cooperation.

Debate Topics and a Stranglehold

The Social Democratic program, "Denmark for All the People," was stressed throughout the congress as the realistic program for a future Social Democratic government. The program was approved by the 1985 congress and many had expected that at the 1986 congress the party would try to formulate the program in more concrete terms and set priorities, but this did not happen.

One of SDP's major issues--defensive defense--was well received. But there were some critical voices; one delegate said it was a "trench defense." Another major issue--a Nordic nuclear-free zone--was criticized by only one delegate and he was met with "boos" from the assembly when he left the speaker's platform. This was Folketing member Poul Nielson who is a member of the party's internal foreign policy committee. He is also president of the coffee club to which Erling Olsen belongs.

Poul Nielson warned against simplifying the problems in the debate on setting up a zone and referred to the trips he made to Washington and Moscow in 1984 with Lasse Budtz and Kjeld Olesen for the purpose of discussing foreign policy issues. The three made it clear in Moscow that the Soviet Union would have to take the next step if any progress was to be made in the debate on a Nordic nuclear-free zone. "But we are still waiting for Moscow," Poul Nielson added. Anker Jorgensen sharply rejected Poul Nielson's warning: "I do not think setting up a Nordic zone is a simple matter. But it is dangerous to make things so complicated that one doesn't believe one can do anything about them."

After Poul Nielson's speech Lasse Budtz came down to the press table. "Did you notice how Nielson's speech was received?" he asked and made a gesture in the air as if he had someone's neck in a stranglehold and gave it a twist.

Poul Nielson also made an allusion to the leadership problem at the end of his speech: "Do we in the Social Democratic Party stand out clearly enough as people who are able and willing to deal with the problems of the 1990's?"

He was also one of many speakers who criticized Ritt Bjerregaard for referring to certain local Social Democratic politicians as representatives of "clumsy boss rule" on environmental questions. From the speaker's platform Ritt Bjerregaard mentioned Fredericia, among other municipalities where there is a problem and Poul Nielson is elected in Fredericia.

Anker Jorgensen did not agree with Ritt Bjerregaard either; he found it unreasonable to call "our people party bosses."

The much-discussed report from the SDP European affairs committee was presented at the congress by the committee's chairman, Birte Weiss, SDP deputy chairman, and it was well received. The report is aimed at making the Social Democrats into a party that is positive toward EC and everyone in the party is interested in moving ahead after 14 years of frustrating debate on EC. Anker Jorgensen and several speakers said that the People's Movement Against EC is dying.

6578
CSO: 3613/5

POLITICAL FEDERAL REPUBLIC OF GERMANY

SURVEY SHOWING COALITION EDGE SEEN AS MISLEADING

Frankfurt am Main FRANKFURTER ALLGEMEINE ZEITUNG in German 10 Sep 86 p 3

[Article by Fk.: "The Two Major Camps--Almost Equally Strong"]

[Text] There surely will again be much talk in the days to come about the considerable edge the coalition has gained over the opposition parties according to the most recent surveys. While true, this result is, for the time being, only of fleeting significance. The most recent "Sunday poll" of the Institut fur Demoskopie [Institute for Public Opinion Research] in Allensbach ("If the Bundestag elections were held as early as next Sunday, which party would you vote for?") showed a remarkable deviation from earlier basic trends: The coalition suddenly increased its advantage over the opposition from roughly 0.7 percentage points in May and July to 6.2 percentage points in August.

The trend of the last 12 months, aside from two or three wide fluctuations, has always shown a difference between the two camps of only one or two percentage points. Besides, the coalition was not at all always in front. There were several months, as the chart shows, in which the PD and the Greens, taken together, had overtaken the government parties. This was particularly noticeable after the successive victories of Lafontaine in the Saarland (March 1985) and Rau in North Rhine-Westphalia (May 1985) and most recently also in March of this year, without there appearing to be any special reason.

Two things can be learned from this: First, an election victory of the coalition--which many people have almost taken for granted since Albrecht's election victory in Lower Saxony and because of the psychological low experienced by the SPD this summer--is not at all that certain. In fact, there are indications that the narrow majority pendulum between the two camps will swing back again in the near future. In any case, the long-term trend does not favor a permanent, stable advantage for one side.

Second, it shows how much public awareness of the relative power of the two camps, which has for a long time believed that the coalition is leading, contrasts with the data obtained from public opinion surveys. For, if the election prospects were estimated separately on the basis of one question about the election prospects of the parties (taken individually) and of

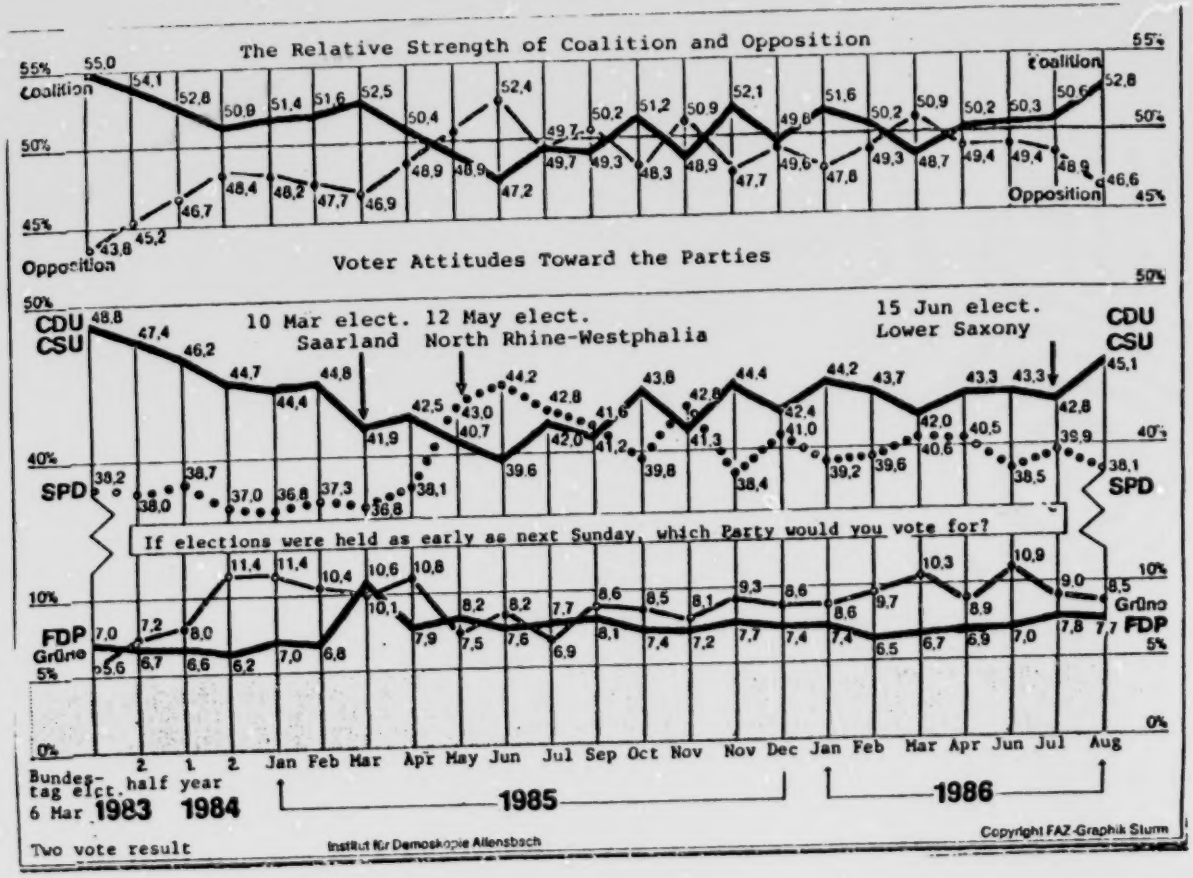
another question about the two major camps, then the coalition would, at the moment, fare extremely well.

A victory--or at least a plurality votes--for the CDU/CSU in the coming Bundestag elections was expected in August by 45 percent of those questioned; a victory for the SPD, however, by only 19 percent (36 percent were undecided). When the question was asked about the entire coalition's chances and those of the entire opposition, taking them as groups, even 47 percent of those questioned decided in favor of the coalition and only 18 percent in favor of the opposition (35 percent were undecided). Even of those who vote for the SPD, only 38 percent believed in August in a victory for the red-green camp; 79 percent of CDU voters, on the other hand, believed that their party together with the FDP would be victorious.

This optimistic estimate is not, as shown by the chart, born out by previous trends of actual voter intentions for both groups. There is a wide gap between individual projections and documented long-term trends. The coalition does not have a January victory "in the bag" by any means. It will have to fight for it, and in this competition the opposition camp still has a chance.

Finally, the chart also shows the relentless wearing down process to which the Kohl government--and in this respect it has, historically speaking, company--has been exposed during the past 4 years. The wide initial margin between the government camp and the opposition--more than 11 percentage points in the elections of 6 March 1983-has subsequently declined over the months until reaching, especially since the middle of 1985, the minimum differences cited earlier. It must be noted that the numbers for the strength of the parties used here are those determined by Allensbach by a special question concerning the distribution of the "second vote", in which those questioned were reminded that they could "split" their two votes in a Bundestag election, meaning that they could give them to different parties.

If one looked, by way of comparison, at the "first vote" result, one would note that there was an internal shift in each of the two camps of, roughly speaking, two to four percentage points. The shift of votes between the CDU/CSU and the FDP, with an average of four points, was considerably higher here than the shift between the SPD and the Greens which was generally only two points.


The Relative Strength of Coalition and Opposition
Coalition
Opposition
Voter Attitudes Toward the Parties
10 Mar elect. Saarland
12 May elect. North Rhine-Westphalia
15 Jun elect. Lower Saxony
CDU CSU
SPD
FDP
Grüne
If elections were held as early as next Sunday, which Party would you vote for?
Bundes-tag elct. 6 Mar
half year
1983
1984
1985
1986
Jan Feb Mar Apr May Jun Jul Sep Oct Nov Nov Dec Jan Feb Mar Apr Jun Jul Aug
Two vote result
Institut für Demoskopie Allensbach
Copyright FAZ-Graphik Sturm

POLITICAL PORTUGAL

EANES URGES POLICY OF POLITICAL ALLIANCES

Lisbon EXPRESSO in Portuguese 13 Sep 86 p 1

[Text] Ramalho Eanes has urged that in view of the reservations of the PS about an agreement with the PRD, that party should plan to establish an alliance with the Social Democrats. This opinion was expressed by the future renewal faction leader at a meeting of the commission which is to draft a strategy motion to be submitted at the October convention. This motion will be distributed to the districts beginning next Tuesday, the 15th.

This document, at the insistence of Eanes, will be more flexible than explicit, so as to avoid major polemics and to allow for more than one solution. The strategy committee, which met with Ramalho Eanes again last evening in Venda Nova (in premises rented specifically to make preparations for the convention), includes Herminio Martinho, Miguel Galvao Teles, Melo Antunes, Correia Gago, Jose Carlos Vasconcelos and Carlos Lilaia.

In explaining his position on this matter, Ramalho Eanes said that although the PRD has no interest in pushing for early legislative elections, it should not oppose them or limit them either, reaching an agreement with the parliamentary left. Acknowledging that his party might see a decline in the next elections, he believes that it will not be too worrisome and will not exceed the 12 percent level. On the other hand, he expressed the view that in order to consolidate itself on the local level throughout the country, the PRD needs government power. In this connection, he even spoke of establishing a government platform with the PSD, following the legislative elections Ramalho Eanes believes are inevitable within a relatively short time. However, he emphasized that such a platform would not be desirable prior to the holding of elections.

Meanwhile, other outstanding renewal faction personalities, such as Galvao Teles and Melo Antunes, made no secret of their preference for closer relations with the PS, despite the reservations the socialist leadership has about establishing a dialogue with the Eanes supporters.

5157
CSO:3542/3

POLITICAL PORTUGAL

CONTRADICTORY OPINIONS ON POSSIBLE PSD-PRD ALLIANCE

Alliance Seen Impossible

Lisbon SEMANARIO in Portuguese 6 Sep 86 p 6

[Article by Marcelo Rebelo de Sousa]

[Excerpts] Alliance Bailyhooed

Over the past few weeks, the idea of an alliance between the PSD [Social Democratic Party] and the PRD [Democratic Renewal Party] has become a popular rumor in the most diverse circles. The purpose of the alliance would be to ensure the government's continuation in power by confirming a growing identity between Cavaco Silva's positions and those held by General Ramalho Eanes.

The alliance would be something like a pact for legislative purposes.

It would last 4 years--that is, until 1990-1991.

On the PRD's side, the inostensible but firm commitment would be to ensure the PSD government's viability until the 1989 elections are held and make new forms of cooperation possible after those elections, not to harm Cavaco Silva's legislative initiatives (once they have been discreetly but effectively negotiated), and to provide people capable of cooperating with the Social Democrats in key posts ranging from information to the public sector.

On the PSD's side, the counterpart would also be three-pronged. First, the PSD would reach prior agreement with the PRD on proposed political and legislative measures, especially those that would have to be submitted to Parliament. Second, it would draw up a list of vacant management positions in state-owned enterprises or the public administrative sector to be given to members of the PRD. Third, it would pave the way for possible support by the PSD for Gen Eanes' candidacy for president in 1991.

That is the most complete version regarding the PSD-PRD alliance.

It is all based on the increasing number of signs in recent months of an understanding between Cavaco Silva and Gen Ramalho Eanes.

Understanding and Alliance

On the basis of the idea outlined above, many upright people in the PSD or the PRD or in neither are assuming that there is going to be a long-lasting, fraternal, and promising pact between the Social Democrats and the PRD.

We must confess that we view the whole carefully arranged construction as a logical impossibility, an implausible setup, and a downright political lie.

It is one thing for Cavaco Silva to have an indulgent liking and tolerant understanding for Eanes and even cordial and understanding relations with him. But it is another for him to accept a political alliance with Sa Carneiro's chief opponent in the crucial period of his government's consolidation.

Understanding, personal closeness, and prudent or friendly relations have to do with each person's tastes, feelings, idiosyncracies, and specific likings.

How often they result from fortuitous circumstances, a chance meeting, an auspicious conversation, some relative affinity, or mutual understanding!

Having recently become leader of the PSD following years of preparation in the wilderness, Cavaco Silva perhaps found Gen Eanes to be an affable and understanding interlocutor who was in tactical convergence with himself. They both had a tremendous urge to clobber the PS [Socialist Party] and Soares. The PSD's immediate need was for a PRD that would be a nuisance to the PS, and the PRD could benefit only with a PSD capable of dethroning the Socialists.

Since then, we have actually been seeing Gen Eanes adopt an air of party-transcending innocence toward Cavaco Silva. The entire political class is contaminated with original sin, greed for power, cupidity, and the corruption of its clientele.

Not Gen Eanes. He was above power, money, the parties, and clienteles. He was pure and immaculate, and he had finally found a kindred soul in another politician who was not a politician and who also was not touched by the temptation of Eve.

Perhaps the two together could redeem the fatherland, which was so tired of petty politicians. One because he had spent 9 years in their midst--living among them, commanding them, and needing them, but managing to achieve the impressive feat of emerging unscathed, with his hands clean, and immune to their wickedness. The other because he was reentering "in white robes," with no acquired vices, no harmful habits, and no limiting commitments.

How can one deny that a degree of easy dialogue would draw two men together when one of them (Gen Eanes) undeniably has the magic power to captivate others in the early stages of any personal and political contact? (It is only later that those he captivates experience their disillusionments one by one.)

But between an understanding and the forming of an alliance there is a chasm which we do not think Cavaco Silva will ever agree to try to bridge.

Coherent and Stable Majority

First of all, the PSD-PRD alliance is a false solution to a real problem.

The real problem is the weakness of a minority government, its "impasses" in Parliament, its precarious prospects, and its unstable existence.

That problem calls in fact for basic solutions ranging from the amendment of election legislation in the long term (to strengthen our country's governability) to the formation of coherent and stable parliamentary majorities within the framework of current laws in the short term.

Cavaco Silva knows perfectly well what those two desiderata mean, and he is even in the unique position of being able to head up the formation of a coherent and stable majority.

And Gen Eanes is probably the first to understand this, since he has long been opposed to minority governments, even with support from others in Parliament, and advocates coherent and stable majorities.

But a PSD-PRD alliance would be everything but a coherent and stable majority. Either it would be a parliamentary agreement with an impact on government--making it weak, fragmentary, and reductive--or it would be a government alliance--in which case it would join two parties whose contradictory programs, voters, and purposes would be a source of the greatest instability.

As we have seen on more than enough occasions in connection with basic laws, there are fundamental contradictions between the PSD and the PRD that not even Gen Eanes' appeals could conjure away.

PRD voters are much closer to the PS and the PCP than they are to the PSD.

Most of the party's political personnel are from ideological areas very different from that occupied by the PSD, and the positions they advocate differ greatly from those it supports.

Trying to achieve convergence between the two means trying to put a bad patch today on something that is going to break up loudly and with serious results tomorrow.

Cavaco Silva may have many shortcomings, but complete political ignorance is certainly not one of them.

He knows what Portuguese parties are like and what they are worth, and he will not commit the glaring error of accepting, much less sponsoring, an alliance between the PSD and the PRD.

Two Parties, Two Sets of Purposes

That alliance would also mean ignoring reality and the purposes of the two parties that would supposedly be involved in it.

The PSD is a party that has both members and voters. Populist by nature, it has everything it needs, with a leader who will be around a long time--as the present one will--to dominate the process of political initiative and constitute the center of our party system in coming years.

The PRD is not a party with members, nor is it a party with voters. It arose as a mixture--partly a protest party and partly a party of notables--all tied to a patron and requiring that it define itself through casuistry (calling itself an "issue party," to use what is now the established terminology).

The PSD is benefiting for now from the existence of the PRD, which is causing erosion in the PS, but it will not benefit at all from allying itself with the PRD either in the government or in Parliament, whether openly or on the sly.

The PRD is benefiting for now from not having to face legislative elections, which would crush it, but it would lose cohesiveness and voters if it gave any allegiance to the Right through an open or veiled alliance with the PSD.

For the PSD, the alliance would be a gratuitous error. For the PRD, it would be a commitment "against nature."

In the long run, the PSD, happy with the seeming tranquillity of 6 more months with an alliance, would lose the political initiative and the opportunity to advance toward a coherent and stable majority.

In the long run, the PRD, kept quiet by the appointment of 30 new managers in the public sector, would lose its voters to the PS and pay the price for being in the government while meaninglessly trying to call itself the opposition.

Cavaco Silva may have many shortcomings, but a complete lack of political intuition is certainly not one of them.

He knows what his party and the PRD are and what they represent, and he will not commit the monumental blunder of accepting, much less sponsoring, an alliance between the PSD and the PRD.

Two Men and a Chasm

Moreover, it is important not to forget the men involved in that illogical alliance.

One is Cavaco Silva: the PSD's worthy and charismatic leader who will be its leader for a decade if not longer. He is the prime minister and an intelligent, hardworking, and intuitive fighter.

The other is Gen Eanes: the PRD's uncharismatic leader who was dragged into the job, a leader who is one without being one--sober, difficult, hesitant, and nebulous.

Whereas the former is politically straightforward, the latter is furtive. But it is poor Herminio Martinho who is paying the price as a politician, since he

is regarded in the polls as Gen Eanes' exact opposite when it comes to honesty.

Whereas Cavaco Silva is a leader, Eanes is a cooperant.

Whereas Cavaco Silva is a voluntarist, Eanes cultivates systematic doubt.

The chasm that separates them is therefore not so much personal as political.

Politically, Cavaco Silva is all that Gen Eanes would like to be but is not.

In the long run, an alliance between the two would be a burden for the former and an apparent escape ladder for the latter.

Cavaco Silva would quickly discover that sharing the driver's seat with Gen Eanes would cost him political initiative and burden him with an inglorious and foolish handicap.

Gen Eanes would soon have to recognize that leadership is not won and asserted at the expense of the leader of another party. The time always comes when situations like that in the MDP/CDE [Portuguese Democratic Movement/Democratic Electoral Commission] bring humiliation--sometimes even to the disciplined MDP/CDE.

Cavaco may have many shortcomings, but complete political shortsightedness is certainly not one of them.

He knows what he is and what he is worth, and he will not take the surprising false step of accepting, much less sponsoring, an alliance with Gen Eanes.

And we will not mention what a moral affront it would be to see and hear that alliance being justified to those who spent years and years thundering against Gen Eanes as a tribute to the positions held by Sa Carneiro, who foresaw exactly what would happen if Eanes were reelected in 1980, as in fact he was.

We refer the least attentive or most forgetful of our politicians to what was being said in the PSD on that subject between 1979 and 1985.

To begin with, there were the concerns being expressed early in 1981 by Cavaco Silva, who was not in the government then, concerning the orthodoxy of the Balsemao government with regard to the basic principles of the AD [Democratic Alliance] and the denunciation of President Eanes, whom Sa Carneiro had pointed to as the opponent and whom it was important never to overlook.

That was 5.5 years ago, but Cavaco Silva's shortcomings certainly do not include political amnesia, which sometimes crops up more glaringly in other, more distinct ways.

For example, he remembers very well the time when he was Sa Carneiro's minister in 1980, and he will not commit the political absurdity of accepting, much less sponsoring, an alliance between the PSD and the PRD.

It is good for us to know that we can rely on a leader who is neither politically ignorant, inept, shortsighted, forgetful, nor opportunistic--one who can distinguish friendship with a man from an alliance with a politician.

It is good for us to have the certainty that the PSD-PRD alliance can only be a lie.

Impossibility of Alliance Refuted

Lisbon DIARIO DE NOTICIAS in Portuguese 12 Sep 86 p 5

[Article by Marcelo Curto]

[Text] In the last issue of SEMANARIO, Marcelo Rebelo de Sousa conjured away the "idea of a PSD-PRD alliance" by attempting to list, with estimable logic, the reasons why that alliance "can only be a lie."

For the time being, let us disregard Marcelo Rebelo de Sousa's remarks concerning the personal characteristics of Cavaco Silva and Eanes and the relations between the two, which are good, as everyone is well aware.

Not that those personal notes are without interest. They are of interest, and very much so. But I feel that political reasons will be the decisive ones and that they very probably are pointing in the opposite direction from that indicated by Marcelo Rebelo de Sousa, especially since he did not mention a number of equally important or more important reasons (I would bet that he did not forget them!) why the alliance should be established.

I will say, only in passing, that Eanes' personal political ambition and the 1991 date for the final (?) duel with Mario Soares are political reasons more than sufficient for making an alliance with Cavaco Silva's PSD highly attractive.

Moreover, it is highly probable that Cavaco Silva will accept the alliance because he needs it, not to achieve an absolute majority, which he sensibly does not imagine he could win alone if there were early elections, but to try for a two-thirds majority in combination with the PRD, that being the majority needed to revise the Constitution in 1987 in line with the Right's wishes.

That is the hitch as far as the PSD is concerned.

The fact is that only Eanes can "force" the president of the republic to call early elections. The electoral price that the PRD might pay if Cavaco Silva resigned and Eanes refused to support the next government would be reduced if there were an electoral coalition with the PSD. But in any case, would not the price be higher a year from now if the PRD were competing in early elections on its own?

Marcelo Rebelo de Sousa's hypothesis concerning the PSD-PRD alliance, or, as he calls it, "the most complete version," is in error precisely because it does not allow for the possibility of "early legislative elections." In our

view, that is Eanes' game, since it is only early elections that are really enticing to Cavaco Silva and Eanes from the standpoint of 1991.

The political advantages of this scenario are considerable, and we have already outlined in brief what they are for the PSD and Cavaco Silva and for Eanes and the PRD. The PRD is currently almost entirely a parliamentary party. This is shown by the polls, the public quarrels that are so at variance with the proclaimed high level of morality, the drop in popularity for Eanes, and the opposition by sympathizers and important outsiders to the very establishment of the party and now to the fact that Eanes has joined it. All indications are that if elections were held now with no arm-twisting and no good political ploy, the PRD would sink like a rock.

And Eanes cannot present himself in that state in the 1991 election. Agreeing now not to support a PSD government or a new government supported by the PS but without the PSD, if only on the parliamentary level, would mean prolonging the agony and subordinating himself. Informing the president of the republic that he refuses to help make a government viable in the Assembly of the Republic after Cavaco Silva's resignation, but with a prior agreement to form a government coalition with the PSD, would be the solution presenting the least risk of a collapse for the PRD. The reason is that in a coalition, Eanes would avoid a separate count of votes cast specifically for the PRD, with the danger, remote and weak, that analysts would detect the loss of PRD votes to the Left, but with justification for creating a stable majority and one probably capable of achieving the two-thirds needed to revise the Constitution. And, last but not least, that would make it possible, with the PSD's support, to keep the hopes for 1991 alive.

Are the PSD and the PRD "two parties with contradictory voters and purposes," as Marcelo Rebelo de Sousa says? But what coalition does not consist of parties whose objectives are, at least in large part, contradictory? What would Craxi or even Kohl say? Are not those "contradictions" blended into the government program?

Does Marcelo Rebelo de Sousa see Eanes hesitating when faced with a choice between the almost certain prospect of sinking and the possibility of staying afloat in a boat he helped build--and with a good share of the crew under his control?

The existence of the PRD is causing erosion in the PS, and the PSD is therefore benefiting, says Marcelo Rebelo de Sousa. The idea that the PRD in its present state could cause erosion in the PS is a strange one. On the contrary, if Cavaco Silva wants to try to keep the PS at around 20 percent, all he has to do is give the PRD a hand by raising it to the level of a government party, with all the well-known benefits that brings.

Political amnesia is not one of Cavaco Silva's shortcomings, but he would certainly say that the Eanes of today is not the man whom Sa Carneiro considered in 1980 to be the source of various evils in Portuguese democracy. He would probably say that Eanes and the PRD are patriotically going to

cooperate in the stabilization of democracy and in the country's economic development.

I am not conjuring, Marcelo Rebelo de Sousa. In the PS and along with the democratic Left, which today is assuming increasingly vast proportions, I will combat opportunism, ignorance, and also the political amnesia concerning Eanes which is still rife on this side.

But unlike you, I am not certain that the PSD-PRD alliance "can only be a lie." Instead of fearing it and conjuring it away, it is better to denounce it (as you do) and to rely on our own strength to defeat it.

Alliance as Temporary Expediency

Lisbon TEMPO in Portuguese 4 Sep 86 p 8

[Article by Julio Santos]

[Excerpt] Cavaco Silva was in possession of all the facts from the start: the PSD was growing, the PS had not yet begun to rebuild, the CDS [Social Democratic Center Party] was going from defeat to defeat, and the PCP was a matter of "folklore." That left the PRD as an opponent-partner (or partner-opponent) on which Cavaco Silva could not rely after the congress in Figueira da Foz.

Claiming to embody a new plan, the PRD has always called itself a key party on the parliamentary chessboard. Sometimes aligning itself with the government and sometimes taking the lead in opposing the government (in connection with the debate on the 1986 state budget, for example), the PRD has in fact been constantly in the political limelight, with the result that Cavaco Silva has not known whether to fight Ramalho Eanes and Herminio Martinho or whether, on the contrary, he should keep courting them until the time is right for new elections. What seems basically certain is that the PSD has been sowing because it knows that the longer it stays in power, the more it will reap in future elections. Cavaco Silva knows it, and public opinion polls confirm it.

The only thing is that in politics as in everything else, exact timing is essential. And the problem right now is to know when "H Hour" will be. In Pontal, the Social Democratic leader unexpectedly gave indications that he was going to play his cards. And just as unexpectedly, he backed down, leaving many doubts in the air.

One thing immediately became clear, however: for the moment, the PRD was not going to change a single comma in its strategy.

And just as immediately, some people again started waving the banners of early elections, while others asserted that there definitely would not be elections. Cavaco Silva wants to govern until 1987. To do that, the government would continue to have the (shamefaced) support of the PRD and especially of Gen Ramalho Eanes, who would have managed to restrain the impulses of those in his party who oppose such an agreement.

So in the final analysis, this government's survival appears to depend on the PRD. But there is an enormous distance between that and an agreement affecting the government or any public agreement between Eanes and the government. We really do not believe that such an agreement will be made. And there are several basic reasons for this. First, it would not help the strategy of either party. In our recent history, whether coincidentally or not, that type of agreement has always involved a weak party and a strong party: a weak leader and a strong leader. And the truth is that the originality of the present situation lies precisely in the fact that the PRD is a weak party with extremely strong leadership (meaning Ramalho Eanes). And although solid and cohesive, the PSD knows that it could get along with Eanes only with great difficulty and that deflating the PRD would be a very difficult job. For its part, the PRD knows that it is impossible to erode Cavaco Silva's leadership and that eroding that leadership is the only way to try to win over a few fringe voters from the latter's electoral base. The PRD also knows that by involving itself (peaceably or not) with the PSD, it would be blurring even further the boundaries separating it from the Social Democrats. That would make the confusion worse: by swinging back and forth between the PSD and the PS, the PRD would be running the risk of seeing its members go over to the Social Democrats, who are currently the fashion in any case.

It is therefore clear, in our opinion, that the courtship between the two parties is not very likely at all to lead to marriage.

This will probably be stated very clearly at the PRD's second national convention, which will be held on 17, 18, and 19 October at the Rivoli Theater. During those 3 days, the PRD is going to lay down the rules for its political activity over the next few months with Gen Ramalho Eanes at the helm. The agenda includes such important matters as amendments to the bylaws, approval of the motion on strategy, ratification of the platform, and elections for the national organizations.

With Eanes as the PRD's leader beginning on 19 October, a lot of things may change in the Portuguese political spectrum. This very matter will be firmed up in the motion on strategy, with all of Saturday being set aside for debate and approval. The document is being prepared with great care by Gen Ramalho Eanes himself in cooperation with Herminio Martinho. It should be recalled, by the way, that the PRD is holding its second convention 1 year after Cavaco Silva's government took office--that is, at the end of the period allowed by the PRD for the government to "show what it is worth."

11798
CSO: 3542/160

POLITICAL PORTUGAL

CRISIS IN CDS-PSD RELATIONS TERMED 'UNPRECEDENTED'

Lisbon DIARIO DE NOTICIAS in Portuguese 16 Sep 86 p 4

[Editorial]

[Text] This is not the first time that the relations between the PSD and the CDS have undergone periods of some tension. It suffices to recall what the last days of the AD were like, and the quarrels, more or less notorious, between Pinto Balsemao and Freitas do Amaral, who at that time governed the destinies of the two parties. What is happening at present, however, is of a completely different nature. What is at issue now is no longer the winning of power by a left wing which, following the revolution, seemed likely to endure, nor even the administration of that government power, once won by the joint action of the two forces. It is instead the definition of the respective electoral space occupied by the two in the framework already defined by democracy.

The crisis between the Social Democrats and Christian Democrats is in fact unprecedented, as has already been seen in its clearest outcroppings, whether it be the negotiations which occurred during the discussion of the motion of confidence presented in the parliament by the government, or the reaction now of the centrists to some of the things Cavaco Silva said about them. And the reason for the substantial change, although it could also have to do with the changes in the leadership of the CDS and the resulting vicissitudes experienced by the party, is above all the strategy adopted by the PSD since Cavaco Silva assumed leadership of it.

In reality, although it now has a doctrine such that it will not be refused autonomy within the Portuguese party spectrum, the history of the CDS at its most triumphant moments, those in which the leaders and founders Freitas do Amaral and Amaro da Costa were the protagonists, was forged through political struggle against the left wing. This was a struggle in which, at least for the majority of its voters, there were no problems of boundaries with the PSD at the critical moments. A single episode may have changed this situation, but it was one which was rapidly corrected--the coalition with the PS. As to the rest, the centrists have gone along for years on end beside the Social Democrats, whether the goal was winning a parliamentary majority or electing their candidate for the presidency of the republic.

Such an attitude, prolonged for such an extensive period, naturally had its consequences. Perhaps it would not even be so far from the truth to say that it was because of noting these consequences, that is to say the subordination required, that Freitas do Amaral chose the path now familiar to us all. But there were those who remained in the party, and the dilemma must have plagued them to the point that it led to the many splits. How should one function in the opposition when the PSD is in power? Should one attack what had been viewed as a natural ally or, on the contrary, should one force it to reestablish the lost alliance? It was this indecision which Cavaco Silva encountered, and it was that to which his response was a definite refusal to make any commitments for the immediate future.

In the view of many centrists, this solution will, and rightly, have appeared to be the kind of move Sa Carneiro might have made. Very simply, the AD was established to win power and to put the PS and the PCP in the opposition. Now, on the contrary, the PSD is already in power, and it is on that basis that the strategy being pursued is of a maximalist sort which would not suffer with the future defection of the centrists. And this forces the CDS to a redefinition, which will have its cost. It might even force it to adopt a political line which no longer is based on the supposition that at the first opportunity, the AD will reorganize, as appears to have been the belief to date.

Could this line already be a part of the harsh criticisms addressed to the prime minister in the party's most recent communique? Would these criticisms reflect recognition that the PSD, even if it has to continue as a minority in the parliament, with or without early elections, may have recourse to other support, so as to do without that of the CDS? If this is the case, perhaps we are witnessing the most important strategic swing made by the centrists in recent years, if not in the whole of their history. We will be excused for saying that there is no guarantee at the outset that this position adopted by Adriano Moreira will be successful or that it will fail. The most probable thing in fact is that it will involve long-term choices and immediate sacrifices. But will the party be able, in order to survive, to pursue a different line of thinking?

5157
CSO:3542/3

GOVERNMENT'S FOREIGN POLICY ERRORS LISTED

Lisbon DIARIO DE NOTICIAS in Portuguese 7 Sep 86 p 7

[Article by Antonio Barreto: "The Seven Sins of the Government"]

[Text] A number of errors characterize the foreign policy of the present government, presuming that its actions in this realm can be so termed. First of all, silence. The government of Portugal has said nothing about international problems, either those affecting the entire world or even those directly affecting us. Concerning Macau, Timor, European fishing rights and the trade difficulties created by the Spaniards, the government has said little, explained nothing, and revealed that it does not know where it is going. On the issues pertaining to southern Africa, the government has evidenced timidity and discomfort and has tried to be invisible. The threats of posed to our products by American protectionist policies have left it mute. The political reforms in the European Community seem not to interest Portugal, or at least its government. Concerning all of this and much more, the government little or nothing to say. It seems that it does not know very well what it is trying to achieve, or how. The idea that silence is always a sign of wisdom, industry and competence is very often wrong. Frequently, silence also indicates ignorance, discomfort and lack of competence. If, given the unusual nature of a given case, silence may sometimes be justified, this is not the case when the silence is consistent. It is a childish error, with dangerous consequences for Portugal, to think that "it is best to keep quiet." The fate of the world, of nations and peoples is at stake every day. There are battles (such as those involving the rights of man, freedoms and peace) from which absence is inexcusable. Just as there are national interests which must be explicitly set forth and defended, failing which they will very simply cease to exist. International political expression is necessary for all of these reasons, plus one other--the development of domestic public opinion. Those who want to have the support of the citizens for their foreign actions (and it is good for a government to have that) must do something to win it.

The second error is passivity. In almost a year of activity, not a single initiative has been undertaken which might reveal the intentions of the government, much less any capable of contributing to solutions in the problem areas of Portugal's international relations. The trip made by Azevedo Soares to Africa, which seems to me to have been handled well, is not an undertaking as such, but seems to have been more of an information-gathering mission. The

repeated visits paid by some ministers to Brussels, overemphasized in the press and on television, were routine visits, some successful and others not, and they only reflected our need to participate in the handling of current affairs. As to the rest, and the rest includes almost everything, there has been no initiative and very little action. Even with regard to the Portuguese communities, there are serious reasons for disappointment. Without a general political perspective, the activity of the government comes down to an uncharacteristic kind of emigrants' trade unionism.

Another error committed by the government is its institutional isolation. The ministers, beginning with the prime minister, are trying to keep their reflections and concerns of an international nature to themselves, if indeed they have any. I hope that at least the president of the republic will be informed promptly about what is happening. Even if this is done, it will be very little. While it is true that parallel diplomacy should be avoided, that the conduct of foreign policy has clearly defined seats of responsibility and that there must be consistent foreign representation of the state, it is no less true that in the modern day, no one should confuse foreign policy and diplomacy. The government would have everything to gain by initiating debate and contemplation. To begin with, by seeking solidarity within the Parliament, the only one in the entire Western world from which international problems are excluded. And then by seeking contributions to discussion and contemplation from the widest variety of institutions, including universities, professional and cultural associations, enterprises, trade unions, etc. And finally, by encouraging active collaboration by and supporting the initiatives of all these interested parties.

The fourth error of the government lies in the belief that the principal contemporary international problems, or at least those which might involve Portugal, are economic problems. Or that the economic and financial problems must precede the others chronologically. The few actions undertaken by the government reflect this conviction. Trade and fishing, Community rules and investments, the foreign debt and other subjects have been occupying the attention of those who should have been focusing on other problems. Obviously, I am not denying that economic questions are important, but they should only constitute the "grocery store" of our foreign policy. Unfortunately, this is not how things are.

The next error results from the idea that within the framework of the European Economic Community, there is no room, or almost none, for a foreign policy characterized by some autonomy and originality, which is in any case made necessary by the characteristics which are our own. In connection with the EEC and its members, it seems that it is no longer even a question of a foreign problem, for the issues seem to be reduced to their administrative, economic and financial dimensions. What would seem to be under way is an overall process of Portuguese adaptation to the Community structures and the resulting normalization. Within this framework, Portugal's sole task would be to obtain funds and facilities. This is what the current European Community policy comes down to. With regard to third countries, the rest of the world, the Portuguese government seems to be attempting to hide within or behind the EEC, either due to the fear of being different or because it has ceased to try to influence the Community itself, or again because it has nothing to say or

to do. These paths must be corrected as soon as possible, if we want to prevent membership in the EEC from resulting in the international neutralization of Portugal. The EEC as well constitutes a foreign policy problem, or rather, another 11 foreign policy problems, and must be dealt with as such. With regard to the rest of the world, particularly the areas of special interest to Portugal (such as, for example, the North Atlantic, the South Atlantic and southern Africa), as well as in some very special cases (Iberian Peninsula, Brazil, southern Europe and China), we not only can and should have our own policies and positions, with their own singular dimensions, but we also can and must seek to influence our Community partners.

The errors listed above are not accidental. They are the practical consequences of more serious mistakes of a general nature. One has to do with methods, and arises from the conviction that pragmatism makes a policy, a strong concept and a plan unnecessary. Foreign policy and the actions of the Portuguese state in the world would thus be viewed as just another area of problems and interests, like a government department, which would have to be managed and administered as best as possible on a discreet day-to-day basis. This would not be my view, but it is the idea the government has of itself and of how to deal with domestic matters. External matters would only be an extension thereof. This is obviously wrong, as I will have occasion to analyze. Internationally, pragmatism and a good dose of realism can be extremely useful (and are for Portugal), but they are only that if organized on the basis of a strong conviction about our national interests.

The seventh error is the most serious of all. It is the error of resignation. The government is acting on the basis of the belief that the limited dimensions of Portugal, its population, its territory and its market do not allow us to have a voice among the nations. The government feels that we do not have strength enough to impose or even to express our will, for it believes that the only internationally credible forces are those with military and economic power. Lacking size and an arsenal, without visible wealth or territory, Portugal would be limited to "moving about in the world to watch the others." The government seems to believe (or if it does not it acts as if it did) that our foreign policy can come down to functioning in respectful and mannerly fashion among the other nations. In NATO, in the EEC and in the OECD, we merely take our seat timidly, looking to our partners for protection and comfort.

These are serious errors. Their consequences are even more serious. All those who can, beginning with the Parliament, should urge or force the government to change its ways.

5157
CSO:3542/163

POLITICAL PORTUGAL

GOVERNMENT URGED TO TAKE ADVANTAGE OF 'FAVORABLE' SEASON AHEAD

Lisbon O DIABO in Portuguese 16 Sep 86 p 2

[Article by Jose Miguel Judice]

[Text] None of the problems that Cavaco Silva may face in the next few months is going to come from any kind of "internal front." That was no doubt the message from the PSD [Social Democratic Party] National Council last weekend. It will be said that it is natural for things to be that way, but political life in Portugal and other countries provides regular proof that contradictions within political parties often wind up being the main causes of the intensification of political crises.

Cavaco Silva is therefore going to face the reopening of Parliament with the greatest possible number of trump cards in his hand. All the macroeconomic variables are favorable, inflation is declining, the balance of payments is in such good shape that there is almost reason to fear positive pressure on the escudo, investment is improving, the national deficit will be much lower than estimated, and public consumption is under control.

In the social area, the crescendo of protest by the Communists is turning out to be a trump card for the government itself. Partly because it will reinforce cohesion with the social base of support, some segments of which were beginning to express a number of limited criticisms. And partly because it will make it difficult for the democratic opposition parties to assert themselves autonomously.

In the area of party politics, the government is benefiting from the fact that the opposition has no joint strategy (made impossible from the start because no single leadership has been established), the fact that no party wants to run the risk of elections (except possibly the PS [Socialist Party] beginning in February or March if it is clear by then that Constancio, even if he loses to Cavaco Silva, will win over Cunhal and Eanes), the fact that Mario Soares' strategy is a "Finnish" plan for becoming a president of consensus (meaning there is no reason to fear that he will want to jump into the arena of political battle with the formation of a government of "independents"), and the fact that the CDS [Social Democratic Center Party] is experiencing internal difficulties and is incapable of defining and implementing, in a form

visible to public opinion, a strategy that will take advantage of what little negotiating power it has.

Cavaco will also benefit from the external factors influencing the Portuguese economy. These range from the EEC's impact as regards Community support and the opening-up of markets (good for Portuguese exporters and for domestic consumers) to the lowering of discount rates in the chief economies, from the dollar's decline to the higher price of gold, and from the probable short-term trend toward a lower tax burden in Europe (which will help the purchasing power of consumers and, as a result, our exports) to the existence of unparalleled conditions for direct external investment by the world's chief economies at a time when Portugal's relative advantages are real.

The only thing the prime minister lacks is certainty as to how much longer he has to govern, seeing that since he does not command a majority in the Assembly of the Republic, he never knows when the opposition parties will decide, rightly or wrongly, that the time is right for a crisis. That basic uncertainty may become the decisive factor in weakening the highly favorable conditions described above.

As regards what has been said, the important question is what happens within the government itself. The fact is that there exists an unavoidable political logic which tendentiously leads any member of any government to want to stay in the government even if that means having to accept a few limitations imposed from outside. Ministers and secretaries of state always feel--as is natural--that they are in the middle of beneficial political measures that give them prestige. Because of that, no one can expect it to be a natural tendency of governments to slam the door in application of the principle that "it is better to be queen for a day than a duchess all your life."

The danger, as is being seen, is that the government as a whole and its members as individuals may yield, consciously or not, to the temptation to "technocratize" the process of government so as to make it almost unassailable by the opposition, thereby making a crisis that would result in the fall of the government very difficult. In the final analysis, it would be a matter of avoiding "political" decisions, which by definition are controversial, and thus of behaving basically like no more than a caretaker government concerned with maintaining the status quo. It would be a matter of governing like someone navigating aimlessly and with no clear objective except to "hang on."

That would involve a double risk. First, the government might fail to make the changes Portugal needs, thus holding on to power for absolutely no reason. Second, it might wind up completely in the hands of the opposition parties, which, as soon as they detect that will to stay in power at all costs, will gradually begin to increase their pressure and influence on the government, and it, in turn, will becoming increasingly restricted and, consequently, increasingly dependent.

The important and innovative thing about Cavaco Silva is that for better or for worse, he has established with his closest collaborators a relationship of independence (or even indifference) that has had no parallel in Portugal since

Salazar. And the speech in Pontal was a clear political expression of the fact that the slogan "hang on just to hang on" is not going to enter the political scenario at Sao Bento through the prime minister. But even so, it is never out of place to draw attention to the danger of the intoxication that comes from occupying the seats of power: the slow habituation that generates a growing dependency and leads from that to possibilism, excessive pragmatism, the rejection of strategy, aimless navigation, and, in a word, to the accommodation that is fatal to any government and, above all, to a government not supported by a majority of deputies.

11798
CSO: 3542/6

POLITICAL PORTUGAL

AZORES SEPARATIST FRONT CHARGES COLONIALISM

Lisbon DIARIO DE LISBOA in Portuguese 9 Sep 86 p 5

[Text] The recent political events concerning the new autonomous status of the Azores "have demonstrated once again that Portugal continues to be a colonial country," according to a communique issued in Ponta Delgada to journalists yesterday by the Azorean Liberation Front (FLA).

The FLA said that "The Portuguese military serving in the Azores are pampered with service vehicles, gasoline, foodstuffs and other items, all at the expense of the Azores.

"On the other hand," the FLA went on to say, "thousands of citizens of the Azores are hungry, mainly in San Miguel."

The illegal separatist organization cited as examples the parish of Sao Jose, where "there are about 3,000 needy people," the jurisdiction of the mother church in Ponta Delgada, with 1,500, and Sao Roque, where there are said to be "about 2,500 needy people."

The Azorean separatists said in this same communique that the struggle will "begin again," because, they say, "white-glove autonomy will lead us nowhere."

5157
CSO:3542/3

POLITICAL PORTUGAL

AZORES INCIDENT COMPLICATES POLITICAL SITUATION

Mota Amaral Interviewed

Lisbon O JORNAL in Portuguese 5-11 Sep 86 pp 4-6

[Interview with Mota Amaral by Jose Pedro Castanheira on 3 September 1986; place not given]

[Excerpts] The phantom of separatism has been revived in the Azores by the high military command of the country. This charge was made by Joao Bosco Mota Amaral, 43, president of the regional government in the Azores and leader of the PSD. In his first interview during the crisis provoked by the "flag war," which took place on Wednesday, 3 September, before the presidential veto had been officially announced, Mota Amaral roundly condemned the military leadership, criticized the president of the republic, justified the silence of the government, but without conviction, and warned the PSD about the future implications of its vote in the Assembly of the Republic.

Armed Forces Discredited

[Question] There are those who give the military leadership credit for calling attention to a problem of national importance which would otherwise have gone unperceived.

[Answer] I completely reject that view. This leadership is discredited--and I censure the high command for this reason--by casting very serious suspicion on the regional institutions, which over a period of 10 years have done work of the most patriotic sort in the Azores.

[Question] Do you not agree that we are faced with a collective error, and that to that extent, a review of the entire problem would be useful and necessary?

[Answer] I do not agree with that theory. I believe that status issue was the focus of very careful contemplation by the pertinent commission. And it is in this way that parliaments function in all democratic countries.

Implications of the PSD Vote

[Question] The PSD is the only party, in terms of the government, with regional and national responsibilities, and it is the only one which has not taken a stand on this problem. How do you view the silence of your party? Does this not indicate, at a minimum, a lack of solidarity with you?

[Answer] Look. The vote was cast in the Assembly of the Republic by the parliamentary group of the PSD, deliberately and freely. I am certain that when the matter is assessed by the parliamentary group, the implications of this vote will certainly be considered and the firm solidarity which has always existed within the party will be confirmed.

[Question] And what about the silence of the government? Can it be that the government will not have an opinion and take a stand on a question with national implications of this sort?

[Answer (after a lengthy silence)] I believe that things could have moved more rapidly. But I understand the delicacy of the issue, and I am certain that the status issue comes under the exclusive jurisdiction of the Assembly of the Republic, and that the government has been informed in the parliament itself about the capacity of the Assembly to defend the national interests in the matters in which it has competence.

[Question] Do you agree with the position adopted by the president of the regional government in Madeira, Alberto Joao Jardim, in refusing to attend the Council of State meeting?

[Answer] This is one position. What I do agree with, clearly and firmly, is the content of the message he sent to the Council of State.

[Question] Dr Alberto Joao Jardim insists that only the national flag should merit military honors. Do you agree with this view?

[Answer] There was never any question of according the same treatment to the national flag and the flag of the Azores. What is indeed at issue is its recognition and acceptance by the military establishment.

[Question] Dr Mota Amaral has enjoyed substantial political credibility on the continent, but it seems to have been almost entirely lost in the past 2 months because of the positions adopted. Do you not feel politically isolated?

[Answer] The problem is a basic one. The issues I have set forth are just and of great national interest, and they deserve better understanding on the part of the higher officials in the country and the public itself. The fact that this has not happened is a dangerous indication that the process of regional autonomy is not understood in the same way as we in the Azores see it and understand it--as a truly national process, in which there is perfect equality of rights for the island citizens, and in which the consolidation of autonomy is a means of affirming the national reality under the specific conditions of the islands.

The questions I raise are, in themselves, just. Perhaps I have not presented them properly. I regret that. Or perhaps they have not wanted to understand them.

No State Posts for the Military

[Question] After having returned to the barracks in recent years, the armed forces have now returned to the center of political life. What do you think about the return of the military to politics?

[Answer] I regard it as a worrisome symptom in terms of the development of our democratic institutions. And I would like to have seen another demonstration of firmness on the part of the national political officials, beginning with the president of the republic. Those in the high command expressed their disagreement on basic issues in the autonomy process, using their supposed patriotism problems as a cover, as if we in the Azores had raised this issue! All of which is totally false, and we firmly deny it, because we believe that the interpretations set forth in the document released by the members of the high commands are baseless and even malevolently intended.

[Question] Dr Mota Amaral has again been accused of separatist inclinations. What do you think about future independence for the Azores?

[Answer] I have answered these charges a thousand times already. The work I have done in the Azores as president of the regional government is plain for all to see, and can be assessed by everyone, freely and objectively. The work of the regional institutions has been patriotic work. The proposal I have urged is the Portuguese, European and Western solution to the problem of the Azores, and it has always had the majority support of the electorate in the Azores.

[Question] Do you think, then, that separatism is a phantom?

[Answer] It is. But it has been revived now by the military high commands. They are doing the country a poor service!

Cavaco Silva's Refusal

Lisbon O JORNAL in Portuguese 5-11 Sep 86 p 6

[Text] Cavaco Silva left Mota Amaral flat, refusing the request of the Azores leader, who wanted to travel with the prime minister's delegation to the United States.

The prime minister stated that this was a trip of a special sort. Mota Amaral accompanied the former prime minister, Pinto Balsemao, and the former president of the republic, Ramalho Eanes, on earlier visits to the United States. Apart from the North American presence at the Lajes Base, there is an enormous community of immigrants from the Azores in the United States. This incident constituted the last "scene" in the conflict between Mota Amaral and Cavaco Silva.

Mota Amaral is still tasting the "bitter cup" of the last two defeats suffered at the PSD congresses in Figueira da Foz, in 1985, and the Coliseum, last May. The winner was Cavaco Silva.

Mota Amaral, a personal friend of Sa Carneiro and Pinto Balsemao, with whom he served in the "liberal wing" of the National Assembly prior to 25 April, was an opponent of the group which sought to oust Balsemao in the summer of 1981, when some leaders wanted the AD prime minister to be the former finance minister of the AD--Professor Cavaco Silva, to be exact.

Mota Amaral was defeated by Mota Pinto in Montechoro, but he continues to be a strong PSD candidate for the presidency. With the death of Mota Pinto just prior to the congress in Figueira da Foz, the triumph of the Mota Amaral-Joao Salgueiro group seemed inevitable. Then Cavaco Silva came to the fore, and this meant disaster for the internal sensibilities of the PSD. And in addition, he was pursuing politics in amateurish fashion in an activist party.

Cavaco Silva has little tolerance for his adversaries, and is somewhat contemptuous of losers.

It will be remembered, for example, how he acted toward former prime minister Pinto Balsemao (refusing him several posts) and Helena Roseta. Now the opportunity for Mota Amaral had arrived. Matters developed as follows.

Mota Amaral wanted a civilian and a citizen of the Azores as minister for the republic of the Azores.

The prime minister, Cavaco Silva, wanted a military officer to be president of the republic, and he nominated Gen Rocha Vieira. Mota Amaral protested, but the nomination was approved.

Now comes the conflict concerning the status of the Azores, and Mota Amaral is receiving no indication of solidarity from the prime minister, who has a seat on the Council of State and is also a PSD leader. Cavaco Silva and the PSD are in agreement with the presidential veto of the Azores Statutes by Mario Soares.

It is natural that the conflict between these two politicians would be discussed at the next meeting of the National Council of the PSD, scheduled to be held on 13 September in Lisbon.

Defeated within the PSD on the continent, Mota Amaral has never been challenged as president of the regional government of the Azores on his own home territory. This was the work of a government involving the PSD alone, and a leader named Cavaco Silva. There are some defeats which cost very dear.

5157
CSO:3542/157

POLITICAL SPAIN

EXISTENCE OF CLANDESTINE CIVIL GUARD UNION REVEALED

Union Leader Discusses Objectives

Madrid DIARIO 16 in Spanish 12 Aug 86 p 6

[Article by Alfonso Domingo]

[Text] Seville--"I don't know about right now, but the Civil Guard definitely had something to do with the GAL right from the moment the latter was established. What is more, the union has the suspicion that Major General Andres Casinello had a great deal to do with it, and we have documentation to prove it. We are illegal, so they are not going to lodge a complaint against us, but if they want to, let them legalize us and we will appear before the judge they choose with all the proof." So said the provisional national secretary of the SUGC [Unified Union of the Civil Guard] yesterday in an interview with DIARIO 16.

The national secretary and the members of the executive committee, among them the organization secretary, greeted DIARIO 16's reporters wearing olive green hoods (that being the color of the corps) at a place to which our reporters had been driven by a contact provided by the provincial secretariat of the union in question. First we had driven around for a while in the car, waiting until the appointment had been confirmed by two telephone calls.

The members of the SUGC National Executive Committee had just held a meeting with the National Executive Committee of the SUP [Unified Police Union], and there they had adopted a series of resolutions, including a petition to the prime minister to legalize the SUGC and a veto of the appointment of Maj Gen Andres Casinello as future director general of the corps, asking that he be replaced by a civilian director general with a recognized democratic frame of mind.

The two unions--the legal police union and the illegal Civil Guard union--are also asking for a nationwide investigation of the Civil Guard's high-ranking officers, who are advocating enmity and confrontation between the two security forces. The two unions also want to support each other and to negotiate a Social, Professional, and Economic Agreement (ASPE) for the state's security corps with the minister of interior.

Lastly, the national leaders of both unions are publicly asking the minister of interior to contact the SUGC using the code provided to him and to inform the media of the points discussed or of his rejection of dialogue.

After the meeting by the executive committees, which was attended by the national secretary of the SUP, Jose Lopez, and by its organization secretary, Francisco Lopez, the members of the SUGC National Executive Committee greeted our reporters with their faces hidden behind olive green masks. Behind them was a poster listing their chief demands.

DIARIO 16 said: "The truth is that with those hoods, you look more like a commando unit than a clandestine union, even though you are in the Civil Guard."

The national secretary of the SUGC answered: "Certainly, it is a shame and a scandal that we have to appear this way, like terrorists, but it is the only way we have to demand our rights, because they leave no other way open to us.

"The government does not want to hear anything about us, although we have contacted the ministers of interior and defense and are hoping that they will answer us through a code. All we get from the high-ranking officers--that is, the military--are threats and persecution."

DIARIO 16: "But are the things you are demanding so dangerous and difficult?"

The national secretary of the SUGC answered: "Quite the contrary, we believe that they are constitutional rights. One of our priority objectives is the complete and real demilitarization of the Civil Guard. The chief obstacle is the General Staff, which refuses to accept the fact that times have changed since the days of the Duke of Ahumada, and the Ministry of Interior is not helping, either. That demilitarization would guarantee the social well-being of the citizens, especially in the rural areas.

"Legal recognition of the Unified Union of the Civil Guard would also be extremely important so that we, the security forces, could feel protected like all other workers. Internal problems--numerous and unpleasant--are taking our attention away from our main missions. And, of course, it is important to make the corps transparent--to 'make it crystal clear'--because no one knows the Civil Guard from the inside."

The national secretary, with whom DIARIO 16 was able to chat later with his face uncovered, is a little over 30 years old and dresses neatly. He is aware of the risk he is running and of how arduous his work is--of how tough the road ahead is. "At first there were very few of us, but now 32 of us are attending the constituent congress as representatives of 21 provinces. Some of the delegates are officers and NCO's."

DIARIO 16: "But your strength is going to lie above all the rank and file."

The national secretary of the SUGC answered: "Naturally, and also in the NCO's. Right now we can say that at heart, about 80 percent of the corps--

that is, some 40,000 men--belongs to the union. Not all of them are paying dues, of course, because there is still terror within the corps that is being fostered by the high-ranking officers, but if we were legalized, there is no doubt that they would sign up."

In the opinion of the national secretary of the SUGC, that would be the only way to avoid situations such as those reported recently by this newspaper in connection with the use of drugs to pay informers or participation in groups such as the GAL. "I don't know how it is right now--at this moment--but the Civil Guard has definitely been involved with the GAL. We have suspicions that Casinello himself had a lot to do with its establishment, and furthermore, let them legalize us if they want to, and if they lodge a complaint against us, we will show the documentation and proof that we have, and there is a lot of it."

Response to Prime Minister's Statements

Madrid DIARIO 16 in Spanish 13 Aug 86 p 6

[Article by Alfonso Domingo]

[Text] Seville--The national secretary of the clandestine Unified Union of the Civil Guard responded yesterday to statements by Felipe Gonzalez, who had said that the union was a fake and did not really exist. The secretary said that "he is not doing democracy much of a favor with those words. I am very disappointed, because the prime minister knows very well that we explained the problem that exists within the institution to him, and his attitude in no way helps the democratization of the corps and the intended change from within. In our own flesh we have suffered the violence of terrorism, which has taken the lives of some 1,000 civil guards. The conviction exists within the corps that terrorism is more a political than a military problem, and one of our demands is that a clear stand be taken--either energetic measures or negotiation, and the latter is the most feasible."

For his part, the organization secretary of the said union told DIARIO 16 that "the amnesia from which Felipe Gonzalez is suffering seems strange, even more so in a period as relaxing as this summer is. He knows what clandestine struggle is and what it costs to come out in the open when we are in such rigid and totalitarian structures. Let him recall the SUP's struggle. At present, we cannot get involved in the dynamics of appearing publicly with our faces uncovered because doing so would ruin us. We must take a few minimum safety precautions. But let the ministry answer using the code we provided, and it will see whether we exist and whether this is all a fake."

In the opinion of that member of the clandestine union, many important things depend on that contact, but if it does not happen, then "that is their problem, not ours. We will continue on the path we have chosen: it is full of difficulties and risks, but we are not going to lose heart, since we are inspired by the idea of democratizing the corps and of adapting to a Spanish society which voted for a democratic constitution. There is a saying in the Civil Guard that we democrats like to use. It says: 'Let the one who commands

realize that he commands men and that he will not be in command forever.' Felipe must not be afraid to make the move, because if he does not move to democratize the corps, the time may come when he will regret it, and there will be no alternative. A word to the wise is sufficient."

Meanwhile, it has been confirmed by DIARIO 16 ANDALUCIA that as was mentioned by some members of the SUGC National Committee's leadership, the reaction by most of the Civil Guard's rank and file to the exclusive interview granted to this newspaper was one of support and satisfaction. "Even the officers are turning democratic and supporting what was said, and that is very suspicious. We believe that an attempt is being made in some quarters to encourage the union so as to nip it in the bud, but we are not going to be so easily duped. Anyone who tries to chop our heads off is definitely going to be pensioned off when he does it."

HB Links GAL, Civil Guard Leader

Madrid DIARIO 16 in Spanish 13 Aug 86 p 6

[Article by Antonio Herce]

[Text] Bilbao--The charges made by the clandestine Unified Union of the Civil Guard concerning Lieutenant General Andres Casinello's ties with the GAL caused no surprise among political forces in the Basque Country. The fact is that on various and repeated occasions, the nationalist parties have expressed their conviction that behind the GAL was a plot that involved various people located in the state security forces and corps.

While declining to assess the statements made to this newspaper by various members of the clandestine SUGC, Inaki Ruiz de Pinedo, a member of Herri Batasuna's national bureau, referred to what has already been said on a multitude of occasions by the patriotic coalition. "We have always said that if anyone wants to know who finances and controls the GAL, he need only ask Casinello and he will obtain important data. Casinello and Alvarez have quite a lot of information on the GAL. That is the place to start."

Kepa Aulestia, secretary general of Euskadiko Ezkerra [Basque Left], declined to comment on the charge made by a union he is not familiar with. But he did say that "this is not the first time Casinello has been mentioned as being behind operations which are not lawful from the democratic point of view and which have been carried out by specific organizations in the state apparatus. What is really disturbing is the fact that a person with that background should be put in command of the Civil Guard, as is mentioned in the report."

It was impossible yesterday to locate a single spokesman for the PNV [Basque Nationalist Party], although that party's opinion on the subject is known. The chairman of the EBB [national executive body], Xabier Arzalluz, has pointed out on more than one occasion that the possibility that people linked to the police apparatus were pulling the strings in those terrorist groups, which began operating in December 1983, cannot be ruled out.

The only discordant voice among the nationalists was that of Ricardo Garcia Damborenea, secretary general of the Basque Socialists, who feels that with their statements, the members of the SUGC "are harming the Civil Guard and are not worthy of the uniforms they wear."

The link between Lt Gen Andres Casinello and the GAL already appears in a book that was published in February of this year under the title "Torture in the Basque Country." It was written by a large team of people linked with the world of Basque patriotism. In one of its chapters it asks the question: "Who is the GAL?" and then goes on to say: "We all know. But officially, according to the police, and legally,... no one knows anything. As everyone knows, not only did the PSOE not purge the repressive apparatus when it came to power, but the Socialists also quickly surrounded themselves with the 'stars' of the struggle against the ETA. Guillermo Ostos, information officer for the Civil Guard, and Andres Casinello, the 'intellectual' of the 'counterinsurgent war,' became part of a task force with the new government."

11798
CSO: 3548/80

DANISH DELEGATION VIEWS GREENLAND'S NEEDS, PROGRESS

Copenhagen AKTUELT in Danish 22 Sep 86 pp 26-27

[Article by Jørgen Ullerup]

[Text] A health service without sufficient funds, a shortage of housing facilities, competitive difficulties, political scandal, alcoholism and violence are but few examples of the vast number of problems facing the relatively new political leaders of Greenland.

The merely 7-year-old home-rule government is still in the process of finding its foothold; therefore, when, in late August, the finance policy committee of the Danish Folketing visited the beautiful, ice-clad huge island, its purpose was not to point at shortcomings but to get an insight into the way in which Greenland is solving its problems.

No Intervention

Since the introduction of home rule in 1979, Danish politicians have markedly avoided intervening in anything which might be described as internal Greenland affairs. Nor have recent revelations of alleged abuse of tax money on the part of Greenland politicians occasioned any Danish comments.

Caution, however, should hardly be taken for indifference. Both historically and culturally, Denmark and Greenland remain linked together, and as pointed out by the chairman of the finance policy committee of the Folketing, Ivar Hansen (Liberal Party), "our children and our grandchildren will be reading a severe criticism in their history books if the project involving the introduction of home rule does not succeed."

Large Contrasts

The Danish politicians witnessed many contrasts during their trip. From the big city of Nuuk (Godthåb) with its social problems and big ambitions to the simple, hard life in the small municipalities and settlements.

For example, the settlement of Claushavn, where the finance policy committee was served coffee in the classroom of the nine schoolchildren of the small settlement. The leader of the settlement, Robin, made a speech to the

powerful guests, stressing the desire of many years among the local fishermen and sealers to have the dangerous and rocky harbor of their settlement improved.

For generations, problems of this nature have been presented to the Danish rulers, but, this time, the finance policy committee had to tell them that they were barking up the wrong tree.

The responsibility now rests with Greenland's own popularly elected rulers, even if the road from the settlements to the government in Nuuk may sometimes seem as long as the one to the former Danish colonial rulers.

Greenland has inherited an administration largely manned by Danes and a centralized political system which since 1979 has been fully occupied taking over the majority of Denmark's traditional tasks in Greenland.

As a result, the home-rule government has not yet concluded its discussion of the distribution of responsibility between the Greenland parliament and the municipal politicians. That discussion will become exciting, several of the members of the finance policy committee state, including Jens Bilgrav-Nielsen (Radical Liberal Party):

"Municipal selfgovernment may, potentially, be carried through to a very large extent, and the settlements should be preserved to the extent desired by themselves," he says.

In a few decades, Greenland has experienced no less than a peaceful revolution from a society of sealers to a modern fishery and industrialized nation. The transition, however, has not been without costs.

Lack of Personnel

Everywhere, social problems are conspicuous, including an extensive alcohol consumption, which is known at all levels of the Greenland society.

Liquor abuse and subsequent violence, combined with venereal diseases, occupy a large section of the physicians and hospital resources.

The health service of Greenland is still completely under Danish management, but due to a shortage of nurses and physicians, it operates at a very low level. Queen Ingrid's Hospital in Nuuk lacks half of its nurses, and at Uummannaq in the north, the only doctor for 2,400 people will shortly leave the area.

Helle Degn of the Social Democratic Party feels "frightened" at the economic prospects for the home rule government, and she fears that it will not be possible to solve the problems at the planned rate.

Denmark Has Cheated

This applies, among other things, to the vast shortage of housing with which the Danish politicians were concerned during a large part of their trip.

When, as of the New Year, the home-rule government takes over the housing sector, they will do so with a feeling of having been cheated of three-digit amounts of millions of kroner, because Denmark has ostensibly neglected its commitments with regard to new construction and renovation.

"There is no doubt that Denmark has cut back its housing expenditures in Greenland. We now intend to bring this issue up before the government," Helle Degn says.

She cannot expect any response on the part of the government:

"I was impressed both at the quality and the number of housing facilities. Compared with the conditions in the northern parts of the United States and in Canada, Denmark has reason to be proud of the housing standard in Greenland," says Bernt Johan Collet of the Conservative Party.

Jens Bilgrav-Nielsen finds it difficult evaluating the extent of housing shortage.

"But there has been an enormous development since the finance policy committee was last in Greenland 17 years ago. At the time, half of the settlements still consisted of peat huts. They are all gone now," he says.

In addition to the housing shortage problem, the home-rule government will be taking over a huge pile of unpaid bills. Each Greenland family is, on the average, 4 months behind in its rent payments, a phenomenon which, according to the Ministry of Greenland Affairs, among other things, is due to a pronounced unwillingness to hand over money to the public sector.

Increased Burden of Taxation

The fishing industry is probably Greenland's sorest point, the country's life nerve, which cannot manage without subsidies from the home-rule government and which may not in the long run either be expected to be able to pay the bill for the rapid development rate. Greenland will hardly be able to manage in the future without big Danish subsidies.

Nevertheless, the home-rule government has got new, big ideas, which shows that it is planning ahead but which will probably lead to an increased burden of taxation and give Greenland a considerable foreign debt.

This applies, among other things, to a hydroelectric power plant project, which, next year, will be initiated with a plant for 500 million kroner at Ilulisat (Jakobshavn), and which fully developed with other plants will cost 3 billion kroner.

"The home-rule government tends to undertake costly projects. It can never be profitable to spend 500 million kroner on the construction of a plant which will provide a town of the size of Præstø with power," says Bernt Johan Collet.

Keep the Settlements

Compared with such large amounts, the problems of the settlements seem minor, although it also costs money to keep the settlements alive.

Some settlements are threatened by migration, because the young people seek education in towns and have got nothing to return to. Others lack possibilities of bying fish, they need more helicopter landings, or they need better harbor conditions as at Claushavn.

"Nothing is gained by dissolving settlements. On the contrary, there is much to lose, both humanly and socially. The social considerations will have to be decisive," says Jens Bilgrav Nielsen.

7262
CSO: 3613/6

ECONOMIC FEDERAL REPUBLIC OF GERMANY

MID-, LONG-TERM PROSPECTS FOR AEROSPACE INDUSTRY ANALYZED

Bonn WEHRTECHNIK in German Jan 86 pp 20-29

[Article by Wolfgang Flume: "Will All Expectations Be Fulfilled?: On the Situation in the German Aviation Industry"; first paragraph is WEHRTECHNIK introduction]

[Text] The German aerospace industry cannot at the moment complain about inadequate utilization of its development and production capacities, even though a certain gap will be left toward the end of this decade after the end of TORNADO production. For the mid- and long-term future, the industry is putting its hopes primarily on major programs such as AiRBUS, Fighter Aircraft 90 [JF-90] and the antitank helicopter. If these projects--currently in part somewhat controversial--can be realized, then the aviation industry really should have no major worries, especially since additional opportunities are opening up in the areas of missiles and drones. The following report makes some observations on the current situation in the German aerospace industry.

In terms of sales, the German aerospace industry, for which the abbreviation IRI is often used, is in fourth place in the world behind the United States, Great Britain, and France. With about 80,000 employees and sales exceeding DM15 billion, it is, to be sure, not extremely large in Germany in comparison with the automobile, electronics and chemical industries. Nevertheless, the German aerospace industry is characterized by a high level of performance and by still--or once again because of space operations--above-average rates of innovation. Possibly because of this and naturally through its high efficiency, it has also been at the top in German industry in recent years with respect to the increase in productivity per employee. The strong move of Daimler-Benz into three firms active in German aerospace shows that this branch of industry is also attractive for other enterprises and thus it may well be that the regrouping in the German aerospace industry is not yet at an end.

In speaking about the German aerospace industry here, we mean those firms that deal completely or at least partially with aeronautical engineering and that have generally come together in the BDLI (Federal Association of the German Aerospace and Equipment Industry). The very name of the association expresses the heterogeneous nature of the German aerospace industry. For one thing, special mention is made of the equipment industry to emphasize its importance

relative to the "superior" airframe firms and, for another thing, to express the fact that more and more German aerospace firms are involved in the "outfitting" of the other military services or that firms not primarily aeronautical are striving to move into aviation.

More Independent Through Diversification

After the concentrations in the 1970's, the aerospace industry is primarily Messerschmitt-Boelkow-Blohm [MBB] and Dornier as so-called air frame or, better, system firms and MTU Munich as an engine firm. About 70 percent of the employees and sales of the aerospace industry are in these three enterprises, whereby the sales figures are not, however, also a measure of value creation. As general contractors, and that is what these firms are in many cases, their share of the work is often only 15 percent and is thus sometimes far below that of many equipment firms participating in the same program. At the same time, it should be pointed out that the sales of MBB and Dornier also include activities foreign to aviation (but generally still military technology), whereby it is sometimes questionable whether or not an air force command system, for example, is still aeronautical engineering.

The two system firms, just as the other enterprises of the German aerospace industry, more and more quickly recognized the signs of the times and diversified, initially more in the aerospace area but increasingly also in what at first glance appears to be unrelated sectors. Medical technology is just one example. Environmental technology is another. This occasionally causes Dornier to have to emphasize that it "is continuing to be an aviation enterprise" or makes old MBB employees feel that they will soon be more a part of a commercial firm than of an aviation firm on account of some new participations by the company in areas foreign to aviation.

With the diversification, the firms want to free themselves from dependence upon the state as the sole contracting authority, which is quite all right with the state, for it is relieved of the "responsibility" for utilizing the capacities of the companies. On the other hand, however, the German aerospace enterprises also recognize that their know-how can also be used in other areas.

Nevertheless, the firms of the German aerospace industry also continue to rely on the contracts awarded by the armed forces, which account for an average of 50 percent of industry sales. Depending upon one's standpoint, this can be lamented or welcomed. The one that is active only in "civilian" areas is envious of what in its eyes is the almost guaranteed capacity utilization in military technology that can be planned several years in advance, whereas the one with a "military" orientation looks with envy to the exports of the commercially oriented firms and their high profits. Whatever the case, there is a kernel of truth for both. Because of the increasingly strong state-promoted competition, life is not easy in either market.

To be sure, the defense industry has the advantage of business that can be planned in the long term. But the number of large programs is also limited and more and more firms are competing for the smaller orders. And as desirable as major programs such as the JF-90--whose volume will hardly make

it a TORNADO program unless it can exported very well--or the PAH-2 may be for system firms and outfitters, one should be warned against becoming so dependent upon the defender again. Will there not be enough problems for a large number of firms when TORNADO production comes to an end in the coming years? And bestsellers such as the MILAN, HOT or ROLAND sometimes encounter tough competition or in the meantime have contributed to a satiated market. The same thing has been true so far for the AIRBUS program: as successful as it may be and as correct as it is to develop new family members, this near monoculture in civilian aircraft construction is extremely dangerous. MBB in Hamburg has recognized this and is searching for a supplementary program.

Also easily recognizable is a change in the German aerospace industry: whereas previously aircraft programs were in the foreground, now there is more and more recognition in the civilian sector of the importance of space operations, not just as an area for high technology but also as a source of sales. To be sure, there are still a lot of public orders here as well--especially for research satellites or platforms--but the future holds more for applications satellites. And in military aviation, the role of the carrier or platform--that is, aircraft and helicopters--has diminished in favor of missiles, whether it be hypersonic guided missiles or standoff dispensers. In addition, more and more use is being made of remotely piloted vehicles for multiple missions. This often represents the first step toward the introduction of robots in the military. The firms have adapted themselves to these shifts more nor less rapidly or are preparing themselves for them with the effect that competition is getting even tougher and that there will soon be no more inheritances. It is, after all, important for one to secure the largest possible share of the almost DM3 billion for development and testing and DM17 billion for the procurement of missiles and drones that the Federal Defense Ministry wants to expend between 1986 and 1992.

New Competitors: Ammunitions Industry

In this connection, an industrial branch that was long considered "obsolete," namely the weapons and ammunition industry, could in the longer term become rather threatening for some enterprises of the German aerospace industry, both system firms and equipment firms. Its technological base has expanded considerably, in part with state support but also through great efforts of its own. The key idea in this connection is intelligent but generally terminally-guided or target-recognizing ammunition. Here too, the importance of the carrier (tube weapon or artillery rocket) has declined in favor of the part that is supposed to reach the target. What was previously seen as a simple steel casing with explosives is still explosives today, certainly, but is guided to the target by aerodynamics, electronics, optics, etc. Here the German aerospace industry has new competition, in part self-generated through cooperation, that will soon be giving it tough competition in its own original area of guided missiles, for the applied technologies do not, after all, differ very much. In addition, the rates of increase for intelligent ammunition are about 30 percent greater than they are for guided weapons. And when most of the missiles first come from Rue IV "Military Hardware" to Rue VII "Ammunition," that may sound like a reasonable concentraton of forces but the "court suppliers" of Rue VII are the ammunition firms, so that the ammunitions industry has even greater chances of being able to move rapidly

into the guided-missile sector. It is precisely some firms of the equipment industry that are sometimes pessimistic here. Still forced to cooperate by the government, they may soon be outflanked by the ammunition firms. And so the are already saying: "We do not want to operate a training program for the ammunition industry!" But this industry sees the whole thing almost as late revenge: "Did not the aerospace industry take a lot away from us 20 years ago when the role of tube weapons declined considerably with the introduction of guided weapons?"

Old Dispute Between System Firms and Outfitters

Today a "linking" element between the ammunition industry, the system firms and the outfitters is electronics but this is likewise resulting in a dispute that may never be settled: what is the task of a system firm and what is that of an equipment enterprise? Both are fighting for the larger and larger electronics share in flying weapon systems, both with arguments such as: technical knowledge in detail here, system know-how there--but where is the boundary? Whoever wants to exercise a system command function must have developed at least one important component, says the system firm; the optimum efficiency of a system is really made possible only through our special know-how, says the outfitter. But despite all the competition, the competitors are cooperating in more and more practical teamwork and are establishing joint subsidiaries. Live and let live...often also a result of the fact that qualified electronics personnel are extremely scarce.

But the competition has also increased between the two large system firms MBB and Dornier. The pretentions of MBB, now documented at the ILA '86 as well, of being the German "leading" firm in aviation and space operations is easily derived, certainly, from the number of employees, sales volume, and also the latitude of the technological fields being worked, but Dornier is now nc longer the "small" enterprise relying on itself for financing. The affiliation with the Daimler-Benz concern will presumably also lead to more willingness to take risks on the part of the enterprise, which has heretofore been very cautious in this connection, thus promoting its movement into new and larger projects or the fight for a greater share in joint projects such as the JF-90, for example. Its withdrawal from the Deutsche Airbus GmbH several years ago because of what was then--rightfully--an excessive risk would probably not have happened as a Daimler-Benz subsidiary. It remains to be seen whether the company, as a "sister" of MTU and AEG, can again extend its technological base beyond the breadth that it has already achieved. In any case, regardless of how independent the firm can be, Dornier is part of a large, indeed very large grouping. And that counts in Munich as well as abroad.

Although externally things have calmed down somewhat, a continuing cause for speculation is the discussion of the regrouping of MBB shareholders triggered several months ago by the rumors of a BMW participation. But has MBB not lived well so far--would a majority shareholder really be advantageous?

Hopes for New Major Programs

At the present time, the German aerospace industry still depends a great deal, indeed too much, upon such large-scale projects as the AIRBUS or the TORNADO as the largest current production projects.

Let us stay with aircraft production for the time being. It can be assumed that the AIRBUS family will continue to provide jobs in the development and production area. In addition, MBB is involved in the Fokker-100 and projects are being prepared with China and Indonesia with the goal of not being exclusively dependent on AIRBUS. Dornier has a few percent ownership in AIRBUS, mainly to utilize its production capacities in Munich. Is it possible that there the current Dornier chairman of the board and former general manager of Airbus Industries, diplomate engineer Johann Schaeffler, is preparing a greater commitment in AIRBUS? He himself should be able to judge best whether such a measure makes sense or not. In any case, if Dornier is to continue to be considered an aviation firm in the civilian area as well, a decision must be made whether the DORNIER 228 is to become a pressure-ventilated small commercial aircraft DORNIER 328. Whether they can still do that by themselves? Even as a member of the Daimler-Benz group, it would be appropriate for Dornier to look for a partner. Dassault or Aeritalia? Or even a non-European firm?

At this point, to be complete, a few words about a special feature of the German aerospace industry, where it is even number one worldwide: glider construction. It is still holding on to the top position that it gained through the early application of glass-fiber reinforced plastic. It is gratifying that Porsche has also developed an aircraft engine and that some firms are taking unconventional paths with novel aircraft designs that will, it is hoped, be financially successful.

The space industry--MBB ERNO, Dornier and some enterprises of the equipment industry such as AEG, for example--probably need not be concerned about the utilization of capacity. The Federal Ministry for Research and Technology is making provisions in this connection through its support for the programs ARIANE 5, the COLUMBUS space station, and presumably the HERMES space transporter as well. To be sure, the question occasionally arises whether one is always involved in the right projects. Is it not possible that the development of the HOTOL [horizontal takeoff and landing] space transporter proposed by the British would be technologically more interesting and challenging than a participation in the French HERMES patterned after the American SPACE SHUTTLE prototype?

In military aircraft construction, the TORNADO production now to be extended through a seventh batch is for many enterprises the decisive factor in the utilization of their production capacities. Programs for upgrading combat effectiveness as in the F-4 and ALPHA JET provide jobs for only a few firms, so that a hiatus will be opening up until the start of the JF-90 production in the mid-1990's.

In the development sector, they are concentrating everything on the hoped-for participation in the JF-90, PAH-2 and NH-90, especially in the equipment industry. A failure of one or the other program would be catastrophic. Licensing programs would certainly utilize production capacities but not development. And this would also greatly limit the technical efficiency and competitiveness of the German aerospace industry relative to foreign enterprises. It is more than questionable whether MBB or some enterprises of the equipment industry would again be able to develop combat aircraft or civilian helicopters, even as European cooperative projects, without the JF-90 and PAH-2.

The situation appears very optimistic in the missiles area. Despite some momentary worries about capacity utilization in the production area, there are development programs such as ASRAAM, PARS 3 or ANS that will be providing jobs beginning in the mid-1990's. In the short term, there will be some reproduction programs that will help to fill the production gaps, at least in part, between the second and third generations of missiles. In the long term, because of the importance of missiles, especially the standoff weapons such as SR and IRSOM, the prospects of industry are even very good. The ammunition industry will have something to say here, however. And the subject of air defense could offer very special opportunities if one truly develops a system here that is aimed at the threat.

Neither should one forget the activities now under way for drones and remotely piloted vehicles. Here, to be sure, the system firms do intend to play a leading role but the outfitters will also compete more intensively, for the aircraft itself plays only a very modest role in the overall system that includes aircraft, sensor analysis, remote control, evaluation,etc.

If such programs as the JF-90 and PAH-2 are carried out, then the engine industry--practically MTU for the larger engines and KHD for smaller engines (with the endeavor to be involved in larger engines such as that of the JF-90, for example)--should not have any worries either, especially since both firms, particularly the MTU, are striving to strengthen their civilian leg. In the case of MTU, the firm's policy of being involved in the development and production of as many up-to-date civilian engines as possible is already starting to pay off.

And neither should the equipment industry have any real reason to complain, provided, of course, that the JF-90 and PAH-2 come. More through the vigorous action of the ministries of economics and defense than through the "awakening" of part of the industrial branch, it was possible to ensure that the German equipment industry has a greater and greater share of major programs. In the case of AIRBUS, for example, the share of German equipment increased from 15 percent in the A-300 and 16 percent in the A-310 to over 30 percent in the A-320. The resulting improved capacity utilizaton in the equipment firms should provide for increased developments of their own, with the result that the outfitters become even more competitive internationally.

Cooperation in New Markets As Well

Internationality or cooperation in the German aerospace industry is indeed a very crucial factor. Without cooperation, practically nothing at all works. After all, by far most German defense projects, above all the large ones, are carried out internationally. Examples of good cooperation, despite minor shortcomings, are TORNADO, ALPHA JET and the German-French missile projects. Will it be possible to repeat this in future projects? It is doubtful in some cases. Let us take the missile programs MILAN, HOT and ROLAND. There were coordinated requirements (even though controversial at first) and only two equal partners participating. What, on the other hand, is the situation today with the follow-on system PARS-3?

Three large partners--France, Germany and Great Britain--and five small partners all want to participate qualitatively in development in accordance with their needs and naturally in technologically high-quality parts, with the result that the program is delayed more and more, the administrative expenditures for government and industry rise, everything becomes more expensive, etc. Is it not possible that here the political price of the participation of the smaller partners is sometimes too high? Too many cooks spoil the broth and tham means as few partners as possible, at least in the conception and definition, if not in the development as well.

Precisely for German industry, a very crucial advantage of the defense cooperation is that it is thereby given the chance to participate almost as a supplier for the export business of its foreign partners. The best examples are the missiles and TORNADO. Here a sort of compensation has been found for the limitations of the otherwise still restrictive German arms export policy.

A new type of international cooperation has appeared in recent years. Whereas heretofore the partners came almost exclusively from European NATO countries, especially with France as the still perferred partner, the German firms seem to be more and more aware of the "world." Indeed, less the United States than the so-called threshold countries. Dornier developed the jet trainer IA-63 PAMPA for Argentina. MBB is now developing a light LCA combat aircraft and the ALH helicopter for and with India. A 75-seat MPC-75 commercial aircraft is to be developed with China and a small BN-109 helicopter with Indonesia--the examples can be continued. Is that all just development aid? In part, yes, but at the same time it is guaranteeing a share in future markets that would otherwise be closed by protectionism.

The Wish: Occasional System Leadership

In these projects, it is possible to put into effect (or it comes about automatically) what the German industry misses in cooperation: a true German system leadership. In their eyes, this lowers their value as partners in international programs. Industry, however, must then be prepared to take some risks. In the case of the PAH-2, for example, Germany wanted to play the role of pilot. At the wish of industry, however, the responsibility was then shifted from MBB to the joint MBB-Aerospatiale subsidiary Eurocopter.

In the handling of joint projects, one partner must not necessarily be number one. It seems to me that it is much more important for more ideas to be generated in Germany with respect to future systems and for these ideas to be discussed with the ministries, so that they can then be presented to the partners as a German proposal or so that the partners can be invited to collaborate. Why must we always jump on one train and why not occasionally play the role of locomotive? Why not, for example, strive for conceptual leadership in an antiaircraft defense for the years after the year 2000 and should it now be called Tactical Air Defense System or EVI?

Capacity Utilization Through Reproduction Programs

Less in the foreground of interest, because they are more pure production than development projects, are the reproducton and compensation programs. If a foreign customer demands compensation, our industry grumbles that this results in a loss of jobs. Without cooperation, however, the customer would not have ordered at all. The same industry, to be sure, is very glad when the agency with parliamentary support demands compensation in Germany for weapons purchases in the United States or even has the systems built here completely under license. In part, such programs as the STINGER, HARM, ARMRAAM or PATRIOT make a significant contribution to the capacity utilization of production. Is it not possible, though, to strive, in an early decision on reproduction, to have the European production for the Americans be considered as a so-called second-source production, with increased chances of competing

with the American offerer even for orders by the American armed forces? This was once presented as possible for the RAM but for a long time no more was heard about it.

Improvement of Efficiency

The difficulties with the major projects JF-90 and PAH-2 natually immediately led to the question: who is responsible for this? Here no quilty party is sought but the discussion of the program delay and related cost increases has somewhat marred the relationship between the government and industry. The industry has probably seldom had its knuckles rapped as much as in recent months--WEHRTECHNIK itself noted this is its investigations of the industry: even board members normally very willing to provide information were intimidated and avoided saying anything that could have offered even the slightest reason for criticism by those "in Bonn." Whereas Undersecretary of Defense Prof Dr Manfred Timmermann in his interview in the May issue of WEHRTECHNIK indicated prospects for an improvement in the efficiency of official defense management, industry also wants to make its contribution to a better program management. Especially the firms now on the firing line are more than eager to show themselves as reliable partners and to convince the Hardthoehe through their own performance that they can meet deadlines and costs. Leading firms also admit that the difficulty of a development program was underestimated or that they themselves were almost perplexed by problems that were not recognized in the tendering of the bid, with the comment by the editor's office at this point that the government also failed to recognize these difficulties in examining the proposals. Here some things could probably be improved if in the early phases of the development process for military hardware somewhat more money and perhaps time as well would be spent so as to be secure against surprises in development later. Then it would also be easier for industry to accept a fixed price for the development or at least large parts of it, perhaps sweetened with the bonbon of also being permitted to produce the first batch. Here, to be sure, honesty is required in the industry. Not that a firm names a low fixed price just to eliminate the competitors and to be awarded the contract and then adds requirements during the development, knowing that it is too late for another enterprise to take its place.

Why No Demonstrator Program?

The industry recognizes that the government (federal ministries for research and technology, economics and defense) is doing a lot in international concert to promote the competitiveness of the German aerospace industry. At times, however, continuity is missed. This is especially true for the preliminary technical work on the JF-90. Here there was a short-term flow of support followed by a long "break in transmission." And so the industry has strong hopes on a positive effect of the long-term research and technology concept of the Federal Ministry of Defense.

What is lamented above all is the lack of a demonstrator program such as RAFALE in France or EAP in Great Britain, not only from the "air frame" industry but also from some outfitters. Such programs--and, on the engine side, one could also name the French DEXTRE and the British XG40--give the

industry in question a competitive advantage over its German competition with respect to the European fighter aircraft. The situation was just the opposite at the beginning of the TORNADO development. At that time, the German industry could have had recourse to technologies and components that were developed for several vertical-takeoff test supporters.

It should be noted, however, that the industry has very often helped out with its own developments, sometimes when money was quite scarce because lucrative production orders were lacking. At the same time, some firms are now striving to improve their competitiveness through the cost structure as well.

Industry Wishes

Naturally the aerospace industry also has requests to the official authorities that go beyond purely monetary matters:

--It laments, for example, the generally inadequate provision of the project management in the public area with personnel as well as with up-to-date worbking tools.

--It is astounded by the fragmentary concepts with which the military service branches sometimes enter into the development of an often quite costly system--often there is not even a concept going beyond the military service branch.

--There are often too many voices speaking at the Hardhoehe and it cannot be discerned which view might be valid in particular cases. Internationally, they already use the Italian word "Germanologia": it is a matter of finding out who in Germany has something to say--the political leadership, the military, the armament sector or even the parliament.

--Are not the German military demands occasionally too high? Can one not also fall back on equipment that has already been developed and thereby save money for other developments?

--Long development times that also become expensive should be prevented through less official bureaucracy. The phase decisions, to the extent that they cannot be combined, should be made more quickly.

For some of these ideas, however, the industry concedes that it is not always innocent when programs are delayed or when it gives in to the many voices from Bonn and then has its own engineers put some additional item or other into the program.

The editor's office of WEHRTECHNIK even had the impression at times that the government and industry have substantial difficulties in understanding each other. It is true that they talk about the same program but apparently in different languages. Were tactical requirements really not read properly by the industry or were they too misleading? Were questions by the industry construed as declarations of intentions? Here both sides should get together with much more trust, should have frank discussions and delve into questions and point out ambiguities in time.

[Box, p 22]

80,000 Employees in the German Aerospace Industry

At the end of 1985, the enterprises of the German aerospace industry registered 79,081 employees and thereby achieved the highest level since its reestablishment in 1955. This corresponds to an increase of 11.2 percent (+7,958) over the number on 31 December 1984. This increase includes 2,364 employees accruing through a changed method of data collection. The "adjusted" increase in employment is 7.9 percent.

Divided into the individual industrial branches, the result is (1984 valus in parentheses):

--Aerospace systems industry	47,115	60 percent	(66 percent)
--Engine industry	7,336	9 percent	(11 percent)
--Equipment industry	22,306	28 percent	(20 percent)
--Materials industry	2,324	3 percent	(3 percent)
Total	79,081	100 percent	(100 percent)

With about 6,000 employees, space operations have a share of about 6 percent of all workers. The number of trainees was 2,996.

About 45 percent of the workers were active in the area of military technology and about 55 percent were in civilian aerospace operations. Including space operations, about 20 percent of the technical employees and workers were active in research and development, 50 percent in production, and 30 percent in maintenance and servicing.

The sales figures for 1985 are not yet available. In 1984, total sales amounted to DM13.43 billion. The systems industry accounted for about 67 percent of this, the engine industry about 10 percent, the equipment industry about 21 percent, and the materials industry about 2 percent.

From exports, that with DM7.42 billion accounted to about 55 percent of total sales, about 79 percent were in the systems industry, about 9 percent in the engine industry, about 8 percent in the equipment industry, and about 4 percent in the space industry.

An extrapolation from the available sales figures permits the conclusion that the total 1985 sales in the aerospace industry will be around DM15 billion.

[Box, p 28]

Key Word: Promotion

The promotion of aeronautical engineering by the federal ministries of research and technology, economics and defense is often falsely equated with subvention. Whereas the Defense Ministry usually pays in full for the development of military hardware because of the special requirements and the difficult marketability of military aircraft, with an increasing tendency to demand that the development firms also participate in the financing, the Federal Ministry for Research and Technology has a support rate of 50 percent,

that is, the ministry and industry split the development costs. In the case of the Ministry for Economics, the support rate is usually 60 percent, except for international projects such as AIRBUS, for example, where 90 percent of the basic development and 85 percent of the improvement development is advanced. Those, of course, are repayable development-cost grants, whereas the Federal Ministry for Research and Technology requires repayment only in the case of development support very near the market. In addition, the Federal Government provides guaranteed credits for the production financing and--with a declining tendency--sales financing support to compensate for the very good conditions through which the sales of American aircraft are supported by the American Export Import Bank.

On the part of the Ministry for Economics, especially Undersecretary Martin Gruener, the coordinator there for the German aerospace operations, future promotional policy is to follow new rules:

--Assistance can be considered only when the enterprises document their confidence in the efficiency of the various projects through a greater financial involvement of their own; public assistance can be considered only as a supplement.

--The promotion is to be concentrated on the support for the development of aircraft; specific help in production and sales, where it still exists, is to be reduced further. An extension of the AIRBUS promotion conditions to other projects is out of the question.

--As an initial ignition, the promotion should fundamentally be concentrated on the development of the basic version. The support of improvement developments should be limited to the extent possible.

--To increase the technology content, the promotion must be examined and adapted continuously.

--As a rule, the support rate is 60 percent. In the future, higher rates of support are possible only for joint European projects.

--The repayment of grants for development costs is still to be linked fundamentally to aircraft sales. As a return service for the acceptance of risks, the Federal Government should participate in the success of the projects even after the repayment of the grants.

--To the extent that the financial situation of the enterprise to be promoted permits, the promotion can also take place through interest-bearing loans in the federal budget with a firm repayment schedule; in case the project fails, the repayment could be suspended completely or in part.

9746
CSO: 3620/4

ECONOMIC ITALY

MONTEDISON SIGNS FOREIGN AGREEMENTS, EXPANDS ACTIVITY

Accord With Czechoslovakia

Milan TECNOSINTESI MESE in Italian Mar 86 pp 29-30

[Unattributed report: "5-Year Trade Agreement Signed in Prague Between Czechoslovak Chemical Enterprise and Montedison Group"; first paragraph is TECNOSINTESI MESE summary]

[Text] The two parties will exchange over $100 million worth of products. The bilateral relations were studied by Deputy Federal Premier Obzina and Managing Director Porta of the Italian company, in the course of a long and cordial conversation. The Italian representative spoke to some 100 Czechoslovak scientists and technical experts.

The Czechoslovak enterprise Chemapol and the Montedison Group have signed--in the Czechoslovak capital--a 5-year trade agreement for the reciprocal supply of chemicals having a total value of more than $100 million. The agreement--which is linked to implementation of the new 1986-1990 Czechoslovak development plan--was signed by Managing Director Giorgio Porta for Montedison and by General Manager Zdenek Mojzisek for Chemapol. Under the terms of the contract the Italian group will sell to Chemapol mainly petrochemicals, chemicals, pharmaceuticals, and intermediate goods for dye manufacture; it will import from Czechoslovakia petrochemicals, chemicals, and diverse intermediate goods destined for use in the manufacture of its own specific products.

The occasion of the signing of the agreement provided an opportunity for the two parties to make a detailed and comprehensive study of their bilateral relations, which also include agreements of a scientific and industrial character. Porta was received by Jaromil Obzina, Czechoslovak deputy federal premier and chairman of the State Commission for Science, Technology, and Investments, and subsequently met with Deputy Federal Minister of Foreign Trade Jaroslav Jakubec and Deputy Minister of Industry Jiri Marcin.

In the course of these conversations, the managing director of the Montedison Group recalled that Montedison's imports from Czechoslovakia represent more than one-third of all Italian imports of chemicals from that country. Moreover, Montedison's exports to Czechoslovakia represent approximately half of all Italian exports to that country. But what is most important, Porta emphasized,

is the fact that this trade is tending to move toward an increasingly diversified--and increasingly high-tech--array of chemical products, aided in this respect by the effective scientific and technical collaboration that is taking place between the two parties in sectors such as plastics, pharmaceuticals, biotechnologies, and informatics.

In Prague, Porta also addressed more than 100 representatives of political, academic, scientific, and industrial circles. He described the importance--and the new particularities--of the chemical sector in the international economic context, citing the forecasts of growth and the principal structural changes.

The speaker went on to name the three fundamental factors that are able to ensure solid growth for the chemical enterprises: technological innovation, internationalization, and diversification, with the latter being the element that makes it possible to penetrate corners of the market that have potential for expansion, and to share the risk that is associated with every individual business enterprise.

Porta emphasized that in a system whose markets are no longer national but international--a system wherein technological development involves the pooling of skills, personnel, and financial resources, and the processes of rationalization relate not to individual enterprises but to entire systems--there is an increasing need, and desire, to find a correct combination of competition and cooperation. The speaker concluded by stating that Montedison had long since adopted this philosophy, and that the Italian group has a continuing commitment to develop specific agreements and master agreements even with countries in areas that are geographically and economically different--and in particular with the CEMA countries.

Agreement With Poland

Milan TECNOSINTESI MESE in Italian Mar 86 p 30

[Unattributed report: "New $170 Million-Plus Agreement Between Polish Chemicals Consumer and Montedison Group"]

[Text] The collaboration that has existed for more than 25 years between the Polish People's Republic and the Montedison Group will receive a new impetus from the 1986-1990 5-year agreement for the reciprocal supply of chemicals that was signed in Milan by Zigmund Stefansky, president of the Polish Ciech Chemical Enterprise, and by Giorgio Porta, managing director of Montedison.

The agreement--whose value is in excess of $170 million (260 billion lire)--stipulates that during implementation of the new Polish development plan, Ciech will sell to the Montedison Group sulfur, inorganic chemicals, and intermediate dyestuffs destined for use in the manufacture of the products of the Italian group. The Montedison Group, for its part, will supply Poland primarily with plastics, chemicals, and pharmaceuticals. Trade between the two parties has always been very substantial: in 1985 it amounted to approximately $27 million (41 billion lire). This reciprocal collaboration also extends to the scientific and technical sphere: under the terms of an agreement signed in 1973,

Polish and Italian technical experts exchange data, which in recent times have related especially to the pharmaceutical, engineering, and biotechnological sectors.

Composite Materials Expansion

Milan TECNOSINTESI MESE in Italian Mar 86 pp 30-31

[Unattributed report: "Montedison Expands Composite Materials Sector"]

[Text] Tecnocompositi--a company owned 55 percent by Montedison and 45 percent by Intermarine--has signed an agreement with Tecnomare for collaboration in the research, development, and planning of systems, structures, and components made of fiberglass composite materials for use in offshore operations.

This initiative combines the superior international experience of Montedison in the field of polymers with the expertise of Intermarine (world leader in the minesweeper sector and in the construction of large-scale fiberglass structures) and the recognized proficiency of Tecnomare in the research, development, and planning of advanced systems for offshore operations.

Today, the Montedison Group has six companies that function in the field of composite materials: Tecnofibre, Tecnocompositi, Texindustria, Lasar, Monfrini, and Nolsa.

Each of the above companies has its own sector of specialization within the vast panoply of uses for advanced composite materials. Composite materials--as is well-known--are used in the aerospace, automobile, and shipbuilding industries; in bulletproofing and other safety equipment; in military and civil defense; in electronics; and in telecommunications. Because of their characteristics of mechanical resistance, light weight, and resistance to corrosion, they also have interesting possibilities for use in platforms designed for the exploration and exploitation of marine petroleum deposits.

Urea Production in China

Milan TECNOSINTESI MESE in Italian Mar 86 p 31

[Unattributed report: "Tecnimont To Apply New Montedison Technology in China For Urea Production"]

[Text] The People's Republic of China will adopt Montedison's IDR urea technology for modernization of the plant in Luzhou (Sichuan).

Tecnimont--the engineering firm of the Montedison Group that is associated with the ME.T.A. initiative--has in fact concluded a contract with the Chinese organization CNCCC (China National Chemical Construction Corporation) for the granting of the appropriate license and the performance of engineering services essential to the project, which will be financed by the World Bank. The Luzhou plant--which currently produces 500 tons of urea per day on two lines--will have its production capacity increased to 750 tons through the adoption of a

single IDR group; this will make it possible to reduce the specific consumption of steam by approximately 50 percent.

The job was awarded to Tecnimont at the conclusion of a competition judged by the World Bank and open to all international competitors.

In addition to opening up a vast export market, the entry into China of Montedison's engineering activities serves to reaffirm the validity of Montedison's technologies in the fertilizer sector, and in particular the urea industry, in which the Buonaparte Forum Group has been the leader for more than 50 years.

10992
CSO: 3528/017

ECONOMIC PORTUGAL

STATISTICS SHOW DECLINE IN INFLATION

Lisbon O DIA in Portuguese 12 Sep 86 p 7

[Text] The annual rate of inflation stood at 13.4 percent at the end of August, as compared to 22.5 percent in the same month last year, the most recent government statistics show.

National Statistics Institute (INE) figures indicate that the downward trend in annual inflation continued in August. According to government predictions, it should drop to 12 percent by the end of the year.

The annual rate of inflation, which was 19.6 percent in 1985, has dropped monthly since the beginning of this year from 18.7 percent in January (the highest of the year) to 14 percent at the end of last August (the lowest).

The decline in inflation is due to the development of prices for "food and beverages," the category with the greatest weight in the consumer price index, which is the main indicator of inflation in Portugal.

In fact, the variation of 10.5 percent which had occurred in the "food and beverage" category by the end of August was the smallest, as compared to that for the "clothing and footwear" category (23.7 percent), housing expenditures (13.6 percent) and various (16.7 percent).

The INE further reports that during last August, prices increased by 1 percent, following no development in the price index at all in July, that is to say neither upward nor downward.

In August, food and beverage prices increased 1.5 percent, prices of clothing and footwear 0.2 percent, housing expenditures 0.3 percent and the "various" category 0.3 percent.

Between August of last year and August of this year, prices showed an increase of 11.5 percent, as compared to 16.1 percent for the comparable preceding period.

5157
CSO:3542/3

ECONOMIC PORTUGAL

IMPROVEMENT IN EMPLOYMENT SITUATION REPORTED

Lisbon O DIA in Portuguese 15 Sep 86 p 7

[Text] In the second quarter of this year, the active population of Portugal showed an increase of 0.9 percent over the preceding quarter, regaining the level seen in the fourth quarter of last year, the National Statistics Institute Employment Survey revealed. The rate of activity was up slightly, but it did not, however, reach the levels seen in 1985.

The unemployment rate was down to the level reported for the comparable quarter of last year.

The volume of the employed population was up 1.9 percent over the preceding quarter. Women contributed most to this increase, and they now constitute 40.3 percent of the employed population, whereas they represented only 39.6 percent of this total 3 months ago.

The increase in employment was seen in the category of workers employed by others (3.5 percent), while the number of self-employed workers was down (-1.9 percent). The increase in employment by others was due solely to the increase in nonpermanent contracts (27 percent).

The improvement in the employment situation falls within the secondary sector, since the primary sector, contrary to what is usual for this period, showed a slight decline, and the variation for the tertiary sector was negligible. The branches of activity which contributed the most to the increase in employment were textiles, construction and the chemical industry.

5157
CSO:3542/3

ECONOMIC PORTUGAL

MOZAMBICAN DEBT CONSOLIDATION PLANNED THROUGH LOAN

Lisbon DIARIO DE NOTICIAS in Portuguese 6 Sep 86 p 3

[Text] Maputo will pay a part of its trade debt to Portugal by means of a loan of $170 million (almost 25 million contos). The loan agreement was signed in Lisbon by the secretary of state for the treasury and the governor of the Central Bank of Mozambique.

"The granting of this loan, guaranteed by the Portuguese state, was the absolutely indispensable condition for normalizing economic and financial relations between the two countries," the secretary of state for the treasury emphasized. He also added that this normalization "still depends on other bilateral negotiations in progress."

The matters at issue, according to that government official, are "the granting of guarantees for new operations; regularization of the situation of the Portuguese enterprises in Mozambique, with emphasis on the cases of the TAP and Marconi; the problem of local mobilization of Portuguese state deposits in Mozambique; negotiation of the ownership situation of the Rovuma and SONEFE hydroelectrical facilities; and also resolution of the pensions issue, which has been dragging on for years, with particularly serious social consequences."

Carvalho Fernandes asked for the initiation of negotiations and special concern on the part of the authorities in Maputo for all of these issues, while at the same time indicating that the government in Lisbon is absolutely ready for any discussion which will make it possible to find feasible solutions of practical utility.

Carvalho Fernandes added that the Lisbon government would greatly appreciate it if the Mozambican authorities would agree to a joint effort with a view to ensuring the allocation of bids on projects to Portuguese enterprises, with international financing. Some of these enterprises have, "despite all vicissitudes, given singular evidence of great loyalty to the cause of development in Mozambique."

The speaker further stressed the relations of friendship and cooperation which link the two countries, stressing in this latter connection the importance resulting "basically from the Cabora Bassa project, the treasury-to-treasury

loans, the credit allocated by the bank with state guarantees and the funds allocated within the budget for undertakings in Mozambique."

On this occasion, the governor of the Central Bank of Maputo said that his government "is ready to negotiate the pending issues," and that he believes the agreement signed will finally make it possible to release the $25 million in credit promised in 1984 when Mario Soares was still prime minister.

Eneas Comiche believes that "The door has now been opened for a revival of Portugal's economic activity in Mozambique," although, in his view, it is necessary for cooperation to develop on "dynamic foundations, such as to overcome the difficulties caused in recent years by a certain lag in the relations between the two countries."

The loan to Mozambique has the guarantee of the Portuguese state, and 12 banking institutions will participate. Repayment will be made in 12 equal installments falling due every 6 months, beginning on 31 December 1990. The purpose is to consolidate the debt owed (capital and interest) as of 30 June of this year, resulting from contracts signed up until February 1984.

5157
CSO:3542/163

BRIEFS

LOAN TO MOZAMBIQUE--The Bank of Mozambique and a consortium of 12 Portuguese credit institutions approved a loan of 22.5 million contos today for the purpose of consolidating Mozambique's trade debt to Portugal in Lisbon. The loan has the endorsement of the Portuguese state, and will serve as the basis for the agreement on the consolidation of Mozambique's trade debt to Portugal, pursuant to the document approved in Paris by that African country and the governments of its creditors, the OECD nations. The amount which will be consolidated in cooperation with the Portuguese bank is the debt, including capital and interest, which had fallen due as of 30 June 1986. Mozambique is exempt from payments on the capital sums for the period between the effective date of the loan contract and December 1990. The agreement will be signed by the secretary of state for the treasury on behalf of the Portuguese government, and by the governor of the Central Bank of Mozambique on behalf of that country. [Text] [Lisbon DIARIO DE NOTICIAS in Portuguese 5 Sep 86 p 20] 5157

SHIPS FOR USSR--The Viana do Castelo Shipyards launched the third in a series of five grain freighters being built for a ship's outfitting enterprise in the Soviet Union yesterday. Christened the Sormovsky 3057, this vessel is the sixteenth built by the Viana do Castelo Shipyards for the Soviet enterprise, and it is bringing in more than 1.4 million contos in foreign exchange to the coffers of the Portuguese state. The orders placed by SUDOIMPORT with the Viana do Castelo Shipyards began in 1976, with the signing of a contract between the two bodies. It was revised in October of 1984, allowing the Portuguese enterprise to undertake construction of the present fiv vessels. The Sormovsky 3057, which was assigned construction number 136 at the Viana do Castelo Shipyards, measures 109.2 meters in length and 13.4 meters across the beam, and it has a hold depth of 6 meters. With a freight capacity of 4,700 cubic meters and an engine capable of a speed of 10.5 knots, the new vessel will be delivered to the ship's outfitting enterprise in January of 1987. At the end of September, the Viana do Castelo Shipyards will deliver the second vessel in the series, which is currently undergoing testing. [Text] [Lisbon DIARIO DE NOTICIAS in Portuguese 5 Sep 86 p 17] 5157

CSO:3542/157

ECONOMIC

SWEDEN

HUNGARY WELCOMES EXPANSION OF TRANSPORT, TRADE TIES

Budapest MAGYAR HIRLAP 16 Sep 86 p 5

[Article, interspersed with interviews, by Istvan Matko: "Trade Deficit Not Mandatory"; first paragraph is MAGYAR HIRLAP introduction]

[Text] Among the relations between Hungarian and Swedish enterprises, we dwelt on tourism in yesterday's issue. Today's report, on the specialized business of international forwarding and trucking, does not depart from our topic. The less so because the interviews in Stockholm, Sodertelje, Malmo and Ystad record some interesting experiences that are worth considering.

The commercial section of the Hungarian embassy in Sweden is on Stockholm's main thoroughfare, close to the Grand Hotel, a motion picture theater showing sex films, and a Burger King. Here I interviewed the section's chief, Robert Geist, who is nearing the end of his tour of duty; and secretary Janos Friss. From them I learned that our trade with Sweden has not changed significantly this year, at least not in value terms. Our export during the first six months was about 32 million dollars; and our import, 45 million. Our trade with Sweden traditionally shows a deficit, which may be regarded as a [illegible] given, one might say. This is due primarily to the limited assortment of industrial goods we have to offer for export, and to their stagnating competitiveness. (Take the furniture industry, for example. Furniture was a significant item in our export at one time. But now its volume is shrinking increasingly; it is not even half of its volume ten years ago.)

Rigs Must Not Run Empty

But favorable changes are also perceptible. Swedish companies, for example, are showing a growing interest in cooperating with us. Consider, among other things, the processes which have taken place in freight transportation between two distant countries.

What is the essence of the change? The fact that several small and large Swedish international forwarding and trucking companies are availing themselves of the services of Hungarian truckers. In his recently published collection of reports on long-distance truckers, Gyorgy Moldova has been the first to describe the following interesting phenomenon: a skillful entrepreneur, TM Transport, organizes from Malmo by phone shipments for our Volan rigs, which

thus earn dollars for Hungary. I interviewed Tibor Mogyorossy, the company's owner, on how this works.

[Mogyorossy] I discovered that the Iran-Iraq war was causing a slump in trucking to the Near East, and therefore the runs of the Swedish long-distance trucks were being shortened. It seemed expedient to seek available rigs in Central Europe. I chose the Hungarian Volan enterprises and have not been disappointed. Their enthusiastic and selfless collectives have been able to offset their relative technological gap with diligence and skill. The volume of business began with several hundred thousand forints in 1981 and now exceeds 200 million forints. We have established good relations with MASPED [Hungarian General Forwarding Enterprise], and with the Hungarian Volan enterprises willing to handle international consignments.

[Question] You are hauling Hungarian goods to Sweden, are you not?

[Mogyorossy] Traffic is in both directions, but we are operating in third-country markets as well. For the rigs must not run empty, because then they would be incurring a loss. Thus it often happens that we haul consignments from Sweden to the GDR, or various goods from Greece to Austria, using Volan drivers from Pecs, Szeged or Debrecen.

[Question] Why do you not use Swedish or Scandinavian trucking firms?

[Mogyorossy] Naturally, I am working with them as well. But the decisive factor in the market is pricing. The fact is that I am able to work profitably with the Volan enterprises, due to their specific situation.

Convoy From Sundsval

TM Transport is cooperating with Nordisk Transport, one of Sweden's largest international forwarders. I met Morgan Gustafsson, the office manager, and Ingemar Andrsson, a member of his staff, in the port of Ystad, where a Polish vessel was taking on cargo. Namely, one of the proven, low-cost routes is by water to Poland, and then by land through Czechoslovakia to Hungary.

[Question] How much business does the Hungarian connection give you?

[Answer] This year, 3.0 million kronor, or more accurately 3.5 million (one corrects the other). According to the statistics, we are moving 50,000 tons of freight a year between Hungary and Sweden, and this volume is growing. The second half of the 1980's appears to be bringing an upsurge in trade between the two countries, and forwarding sensitively reflects this.

Consider, for example, our most recent contract that we handled in cooperation with TM Transport and Hungarian Volan enterprises. Hungary's Paper Industry Enterprise bought a complete plant here in Sundsval. Huge tanks and other chemical-industry equipment had to be hauled nearly 2000 kilometers by road, in convoys. Our customer was TECHNOIMPEX [Foreign Trade Enterprise of the Machine Industry]. With their help, we were able to ensure that the unusual truck convoys reached their destination in Hungary safely.

(Incidentally, the intentions of Nordisk Transport could be of great importance to Hungary's venturesome Volan enterprises. This huge Swedish company spans the entire globe, accepting consignments by sea, air and highway as well. Its network of agents systematically handles the bookings.)

Sodertelje lies 20 kilometers from Stockholm. Industrial plants and warehouses have been located here to supply the capital. The Dutch-owned Hiwa Company, for example, plays an important role in the distribution and forwarding of Hungarian shipments of fruit, vegetables and meat products. Its cooperation with Hungarian enterprises has not always been smooth. In 1983, for example, it had a dispute of a financial nature with HUNGAROFRUCT [Cooperative Export Enterprise for Vegetables and Fruit]. Neither the Stockholm representative of HUNGAROFRUCT nor Gerard Dubois, the director of the Hiwa warehouse in Sodertelje, wants to remember it. Their attitudes could be summed up as follows: "Let's forget the past; the present and future are more promising."

[Dubois] It is in our interest to sell as much Hungarian fruit, vegetables and meat products as possible. In our opinion, the demand for them is growing at present. We are in contact with the ICA supermarket chain and are getting our market information from there.

Too Difficult?

Hiwa handles about 3500 tons of Hungarian merchandise. This is the destination of a significant proportion of the trucks arriving from Hungary. There is a packing room next to the well-equipped, automated refrigerated warehouse. There are large containers with fruit juices from Spain, Portugal, Italy, France and Greece in the thermally insulated, aluminum-lined room.

[Dubois] I would gladly handle also Hungarian fruit juices. I know that they taste good and are competitive. Why don't the Hungarian enterprises ship some here? Interest in your country is growing perceptibly in Sweden. After the difficult years of recession, the market is in an upturn. It would be worth your while to take advantage of this upturn. I will not deny, of course, that an increase in the volume of trade would be in my interest as well.

Scandinavia with Sweden is far away. One of the world's richest and most demanding consumer markets is to be found here. Perhaps this is why a few Hungarian enterprises often dismiss with a shrug the opportunity to export here, saying that this is too hard a nut for them to crack.

But times are changing. The two countries granted most-favored-nation status to each other in 1983, and they have mutually waived visa requirements since December 1985. Undeniably, the number of mutual visits is increasing; and the enterprises are seeking new opportunities for cooperation, of which only a few have been mentioned briefly here.

There is also more. Hungary is now a topic of discussion in neutral Sweden. Our ads and travel brochures are being studied with interest. And there is also more willingness to do business with us. This willingness is worth noting. After all, the trade deficit is not mandatory.

1014
CSO: 2500/18

TRADE UNION FEDERATION HEADING FOR IDENTITY CRISIS

Stockholm DAGENS NYHETER in Swedish 14 Sep 86 p 12

[Article by Claes Leo Lindwall under the "Insight" rubric: "LO Heading for a Crisis"; first paragraph is DAGENS NYHETER introduction]

[Text] On Saturday 300 representatives will assemble in People's House in Stockholm under red banners to the music of Stockholm's Streetcar Band. The LO, [Swedish Trade Union Federation] one of the world's most powerful union movements, is holding its congress. But the movement is on the way to an identity crisis. When the representatives go home after one week they will have taken positions on 630 motions, 2 reports, and chosen the leadership of LO. The decisions will be made in great unanimity. With equal unanimity the representatives will stand behind the choice of leaders. Because congresses are manifestations of unity around decisions which have, in practice, already been made.

But despite this demonstration of unity, despite the strong "ideological cement" which holds LO together, cracks are beginning to appear in the mighty machine.

Within LO tensions are growing between private employees and public employees, between the employees in branches which have a high growth rate and those in branches which have a low growth rate.

There is an external pressure which is driving the tensions, pressure of the low growth in productivity. The old patterns and instruments are no longer valid.

During the period since the war LO's strategy has been to elevate the earners of low wages, and at the same time giving the earners of higher wages respectable wage increases.

Rehn-Miedner

At the LO congress in 1951 this strategy was formulated as the solidarity wage policy and incorporated in the social economy by Gosta Rehn and Rudolf Meidner.

The idea behind the solidarity wage policy was that it was the nature of the labor which should decide the wages, not how profitable the business was.

A lathe operator should have approximately the same wage regardless of where he worked.

If a company could not afford to pay that wage then it was not competitive. The company should not be subsidized by the workers working for lower wages. Instead the company should be closed and the employees should take jobs with more profitable companies.

On the other hand if the company was very profitable that was no reason for it to pay employees higher wages. Instead the profits should be used for investment in new jobs or paid to the state, which would use the money to expand the public sector.

The expressed goal of the solidarity wage policy was equal wages for equal jobs, rationalization of Swedish industry, low inflation and low unemployment.

The policy was largely successful until the beginning of the 70's.

Productivity increased strongly, government power remained firmly in the hands of the Social Democrats, and wage policies were made by LO and SAF [Swedish Employers' Confederation].

Rocking the Boat

During the 70's the picture changed. The oil and currency crises came on the world's markets, the Social Democrats lost governing power and the civil service movement grew to be the equal of LO.

The growth of productivity was insignificant.

That upset the solidarity wage policy.

The low growth was no longer sufficient.

The demands of the low wage earners, higher wage earners and from the public sector exceeded the small growth. The result was growing inflation and wages in industry rose too high. LO and the Social Democrats saw this as a passing phenomenon. As soon as business conditions changed things would be all right again.

That is how LO saw it at the congress in 1981, and the Social Democrats in the election of 1982.

Halved Growth

But growth of productivity continued to be low. Not only in Sweden, in the entire western world the growth of productivity was only half of what it was during the 60's.

In negotiation after negotiation, therefore, LO's Stig Malm has preached temperance. The small growth, the small margin should go to the low wage earners.

Even the goverment was forced to lower taxes and tighten belts in the public sector in order to enable the paying of real wages. While LO urged closing ranks around the solidarity wage policy and low nominal wage increases, wages for mainly the higher paid workers in industry rose greatly.

Opposition

The reverse of this coin is becoming all the more clear. Opposition between the groups on the labor market increased, both within and outside of LO.

The strength of the demands for compensation grows from year to year. Everybody wants more and more for their share of the small growth.

The tensions even extend to the national secretariat, LO's executive committee, between Sigvard Marjasin of the municipal workers and Leif Blomberg of the metal workers.

But the threat against LO exists even locally. Just a few days ago the powerful workshop union at Volvo went against both LO and the government and said, "Don't touch our profit shares!"

New Way

Profit shares have been a new way for companies and local clubs to avoid the solidarity wage policy when more difficult obstacles have been raised against wage glides.

But in practice profit sharing functions in the same way as wage glides, employees in profitable companies get more than those in unprofitable companies.

And the same demands for compensation from other groups on the labor market will follow.

And again the danger will increase of the Swedish economy coming out of balance.

A number of strategists within LO and the Social Democratic Party do not believe that the labor market itself can achieve the necessary balance. In the famous SAMAK report Kjell-Olof Feldt and LO's Clas-Erik Odhner and others advanced the idea of a "negotiated income policy."

Third Party

The SAMAK model means the government should take its place as the third party at the negotiating table.

The SAMAK model has so-far failed because the opposition from employers and union organizations has been too strong.

But in the agenda before the LO congress the questions arise again.

How shall we cope with inflation? How shall we manage unemployment? How shall we divide up growth?

The questions are there, but not the instruments for solving the problems.

Therefore the LO congress will appoint a number of committees. For wage policy, for tax policy and for "negotiated surplus distribution."

The Government

Perhaps the committees can indicate how to repair the cracks in the machine.

Or perhaps, as many union leaders believe, the center of gravity of income policy is moving more and more toward the government, as in the neighboring Nordic countries.

Or, as in West Germany, the center of gravity will remain with the employers in a strictly centralized system.

9287
CSO: 3650/3

ECONOMIC TURKEY

STATUS OF WORKER-OWNED FIRMS IN GOVERNMENT PROGRAM REVIEWED

FRG Oversight Agencies to 'Observe' Firms

Istanbul DUNYA in Turkish 27 Aug 86 p 3

[Report by Levent Akbay]

[Text] Ankara--The rehabilitation program first initiated by DESIYAB [State Industry and Worker Investment Bank] in 1985 will be subject to the oversight of international organizations. To that end, representatives of the oversight organizations are coming to Turkey to evaluate the rehabilitation program.

The international oversight organizations will evaluate progress of the worker-owned firms in the rehabilitation program--which was started by DESIYAB in 1985 with 6 worker-owned firms which were later joined by 6 more worker-owned firms in 1986--since the beginning of the program. It was learned that a delegation composed of the representatives of the said organizations will arrive in Ankara this week to "observe" the performance of worker-owned firms in the rehabilitation program in various parts of the country for the next three weeks.

The rehabilitation program, launched with money from a special fund established in accordance with an agreement signed with the FRG in 1972, may be monitored by FRG oversight agencies whose expertise is recognized worldwide in accordance with the terms of the said agreement. The representatives of the organizations who will prepare a report about the success of the 12 worker-owned firms in the program will evaluate the firms in their actual environment for 3 weeks.

According to DESIYAB officials, the worker-owned firms, whose number will increase to 18 next year, are eligible for low-interest long-term loans from the special fund. The firms in the rehabilitation program also receive support in technology selection, market research, management and administration.

Worker-owned Firms in the Rehabilitation Program

The worker-owned firms, which receive long-term, low-interest loans from the KOF-2 fund as well as administrative, technical, financial and managerial assistance by participating in rehabilitation projects, are selected by the

Turkish-German Working Group which is affiliated with DESIYAB. Successful candidate firms selected for the program are desired "to be able to withstand competition in the business branch chosen, to produce high added value products, to operate in high-priority development regions and to have a high export and job creation potential."

In 1985, the firms that were included in the rehabilitation program were Gentas, Astas, Gumuskale, Zimas, Aykim and Gazikkece. The first five of these firms have already had their projects approved and obtained their loans. Zimas and Aykim went into operation recently. Gazikkece's rehabilitation report has not yet been completed because of uncertainties in the firm's organization.

The firms that were selected for the 1986 rehabilitation program were Upas, Guryem, Cepnigucu, Akdag Leather, Hisersan and Poris. The first two of these firms have completed their rehabilitation reports and obtained their loans. The others will complete their reports soon.

Worker-owned Foundry Firm Said to Be Profitable

Istanbul DUNYA (Supplement) in Turkish 27 Aug 86 p 1

[Text] Abdil Kades, executive board member of Uygar Motor [Denizli], said that his firm is the only profitable worker-owned company in Turkey.

Stating that many firms have been set up since the days when Turkish workers were sent abroad to work, Kades said that these firms did not know how to take advantage of government programs and that as a result they either went bankrupt or changed ownership. Noting that two-thirds of the 320 worker-owned firms established so far have either changed ownership or gone bankrupt and that very few of them have remained successful using government and DESIYAB assistance, Kades said: "We are the only profitable worker-owned firm."

Kades gave the following information about Uygar Motor:

"Uygar Motor is an integrated foundry plant. It specializes in pig iron casting and iron alloys. We do all types of casting. In the last 2 years we have been casting alloy rollers which used to be imported from abroad. We also cast Auer stove structures. At the beginning of this year we bought a 155-million-lira spectrometer. We are using the low-cost loan we have obtained from the Turkish-German Economic Association to modernize the mechanical department of the plant. We are hoping that after this work our annual production capacity will increase to 15,000 metric tons."

9588
CSO: 3554/08

MILITARY BELGIUM

RETIRED GENERAL RESPONDS TO CRITICISM OF ARMY

Brussels KNACK in Dutch 10 Sep 86 pp 34-38

[Article by retired Lieutenant General Jef Segers, until recently Army chief of staff: "On Leaders and Comrades"; first paragraph is KNACK introduction]

[Text] During summer vacation there was criticism of the reforms recently carried out in the Army. "Military service is useless," they even said. A reply.

During the silly season newspapers and television programs created the impression that something is wrong in the Army. There are or were said to be differences of opinion between generals who cannot tell whether angels are of the masculine or feminine gender.

As in all institutions involving people, naturally there are sometimes differences of opinion in the Army too. It would have been miraculous if in my military career I had only received approving applause. Of course I was not always able to make everybody happy, naturally I was not able to meet everybody's expectations, not everyone could get what he asked for or sometimes even what he had a right to. That sometimes led to criticism in the press and to personal attacks. They never kept me awake at night.

Now, however, what is at stake is the confidence in the armed forces and not the personal happiness of some older generals. Impulsive statements in a possibly unguarded moment and the ill-considered writings of a few must not create the impression that the efforts being made by this country and by its youth are useless.

The many officers and NCO's of our cadres who are trying day in and day out to instill confidence in the troops, confidence in our resources, in our technology, and tactics, must not lose faith in their task. An army's real power is in its confidence in its own ability, in leaders and comrades, in reliance on the men one must lead. That confidence is essential, it is more important than cannon, tanks, and aircraft.

In recent years we have made great efforts to build up confidence in our army, first among the troops, then among our allies and our political leaders, and we have succeeded. Our antiaircraft units along the Iron Curtain have been

brought up to standard and can do their job. That has demanded enormous efforts, above all from the young men there in the garrisons farthest from Belgium. With support from the parliamentary committees, the dedication of the successive ministers, and the exacting work of our staffs, who have all worked to make the necessary resources available, our antiaircraft defense now meets all NATO standards.

And on the ground? Through a drastic reorientation of funds our staffs have succeeded in considerably increasing the number of exercises, training days, and allocations for training ammunition and fuel, and that was before the price of petroleum began to fall.

All corps, company, and platoon commanders can bear witness that their unit has trained more in the past 2 or 3 years and with more resources than in the past. Those exercises, that training form the basis for the confidence and self-confidence the troops have to acquire in order to survive in a crisis.

Materiel. That has largely been brought up to date. We are equipped with the best field and antiaircraft artillery available today and--finally--we possess large supplies of ammunition of the latest type. The infantry has been completely brought up to date and the parliamentary committees and press were recently able to visit the Ardennes Jagers to see all that has been accomplished. New combat vehicles have replaced 25 and 30-year old armored cars and there are now effective antitank rockets available even at the lowest level, even in reserve units. The infantry also has been given more men, while new rifles and machine guns, the best in NATO, are getting to the units on a large scale.

What is all the fuss about then? It is true that new combat and winter clothing is being bought with money originally allocated for parade uniforms. The money can only be spent once after all. Where the priority should lie became clear to MP's of all parties from their personal experience of March storms and April showers during last May's exercise for carabineers and paratroopers in Otterburn in Northumberland.

It is also true that some antitank weapons and crews have been organized differently in the brigades, decentralized. That freed up staffs that have been used to strengthen other, undermanned staffs. Not a man lost in other words, not a gun less, the only thing that disappeared was the bugle salute for some corps commanders. Is that a tragedy? Is that the malaise people spoke of?

Tank units will form the backbone of our mobile defensive force for years yet. Thanks to the strengthening of the artillery and the infantry, we can now hold back the Leopard tank units for the counterattack. They no longer have to be broken up and dispersed to support units in line.

The staffs and logistics units, in cooperation with our arsenals and with industry, have worked out a modernization plan to make it possible for the Leopards to take on the best a potential opponent can put into battle. We have also acquired the most modern and "decisive" ammunition.

It is true that we should be able to deploy more tanks. A few years ago we still had 800, now just 334. In the 10-year plan they are studying how our tank force can be expanded. We will have to allocate money for that in the 1990's and we will also have to transform still other units into tank battalions. But before demanding new tanks, the existing ones have to be deployed and used. Or is that not so?

There have indeed been delays in the helicopter program. All those responsible realize how urgent and necessary this is and when there is money to get the 10-year plan back on the tracks, the helicopters will be acquired. But how logical is it to accuse us of doing nothing to acquire antitank helicopters to combat the great danger presented by the enemy's tank superiority, and simultaneously to argue that it is wrong to exchange light reconnaissance vehicles for real tanks because "the other side has only 270 heavy tanks." It seems to me that a choice has to be made.

RITA

Then there are our communications. Are we really deaf, dumb, and blind? Are our communications and information services really bad? Has NATO thrown away the billions we have jointly spent on the AWACS? Have we spent billions in vain for the RITA transmission system that we developed with the French and that is now to be purchased by the United States? Have the Americans suddenly acquired the habit of purchasing inferior equipment abroad and ignoring their own industry?

Is the Belgian military communications network BEMILCOM useless, when it cost so much and is supposed to form the backbone of communications through Belgium in wartime--for the government and NATO too? Do the Belgian and West German civil telecommunications systems no longer exist, and what has happened to the NATO Integrated Communications System?

Certainly there is a need for further automation and for better transmission of the stream of information to all levels by means of data processing and a computer network. This is being worked on hard by all the national defense staffs and as soon as the funds are available for the 10-year plan, the pace will pick up here too.

Military service is not useless. The efforts of the cadres in the units produce results. We have solid battalions, companies, and brigades, active and reserve. Our staffs are made up of hard-working, efficient, and intelligent staff officers who, fortunately, have a sense of humor. They will continue in the future to serve our armed forces and do their duty to the best of their ability.

Our armed forces, from para-commandos to logistics helpers, from tankers to cooks and bakers, are led by competent and energetic chiefs who know their job and can do it. Now that I am no longer one of them, I can say that.

12593
CSO: 3614/6

MILITARY FEDERAL REPUBLIC OF GERMANY

COMBAT AIRCRAFT TO UNDERGO EFFECTIVENESS UPGRADING

Program Goals Outlined

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 492-493

[Article by Air Force Chief of Staff Lt Gen Eberhard Eimler: "Luftwaffe Weapon System Combat Efficiency Upgrading"]

[Text] Today we can estimate a lifetime of more than 30 years--figuring from the start of development--for Luftwaffe weapon systems.

Understandably, it is impossible to make any unambiguous predictions about changes in the threat over such a long time span and about tactical concepts and technological innovations in fending off the threat. The conclusion to be derived from that points to the implementation of performance-improving measures in the course of weapon system utilization. For economic reasons and in order to restrict availability as little as possible, individual measures are combined into combat efficiency increase programs.

Combat effectiveness upgrading or at least combat effectiveness maintenance however presupposes that the system contains a corresponding growth potential. Steps must be taken for such measures already during the system's design.

New technologies require a careful estimate of the risk. Only tested components, which meet the strict criteria of unit employment, should be considered here. In this way one can avoid cost-increasing changes during the development or introduction of a weapon system; at any rate, the lifetime costs are determined extensively during the development stage. The objective here is also to tighten up the time frame for development and introduction.

Combat efficiency upgrading during the utilization phase is then a possibility for effectively responding to the changing threat and fully utilizing the available potential.

The decision as to combat efficiency upgrading must be justified by the expenditure as compared to the benefit, related to the system's remaining utilization time. This often means the deletion of nice-to-have items.

In the design of new weapon systems, it will in the future be much more important than it has been until now to concentrate on that which can be done. The unit must have a system commensurate to its mission; the subsequent performance increase, which must be built into the basic design, is an efficient measure in this context.

F-4F Combat Effectiveness Upgrading

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 494-496

[Article by Maj Klaus Zaepfel: "F-4F Combat Effectiveness Upgrading"]

[Text] The Phantom is one of the most successful combat aircraft programs in the history of numerous Western air forces. The first F-4 flew already in 1958. More than 5,200 aircraft of this type were built in different variations in the course of about 2 decades. It would appear that at least 3,000 F-4 aircraft are presently still employed as fighters, bombers, reconnaissance aircraft, and in other roles.

Need for Combat Efficiency Upgrading

The F-4F Phantom II of the German Air Force must remain operational until the start of the introduction of the Fighter 90 at the end of the 1990's. The F-4F combat effectiveness upgrading program, which is described in greater detail below, is designed to contribute to doing a better job in meeting the grown enemy threat.

The known defects of the F-4F weapon system are to be corrected by means of measures which, in the air defense role, will make it possible:

to conduct combat operations at the greatest possible range, from all aspects, during any kind of weather, and also from a tactical height gain situation beyond the enemy's counterfire range and in spite of electronic jamming;

effectively to engage even a numerically superior foe (multiple target engagement);

to veer off after firing one's missiles (Launch and Leave/Fire and Forget) in order to evade counterfire;

in the air attack role to engage targets:

with a high on-target effectiveness capacity,

with unguided and terminal-phase-guided conventional munitions with a high degree of effectiveness.

The F-4 of the German Luftwaffe

The Luftwaffe began its Phantom II Program in 1972 with the purchase of 175 F-4F for two fighter and two fighter-bomber wings (Figure 1). The so-called

"Peace Rhine-Program" was initiated already in 1975 for the purpose of adapting modern conventional weapons in an effort to equip the F-4F in accordance with the threat at that time. The essential elements of this modification effort included the installation of a digital weapon computer and the exchange of the radar scopes for television screens in the cockpit. Using the weapon computer, it is now possible to calculate the firing data of the AIM-9L, of the ground-to-air weapons, and the on-board cannon and to fire the weapons automatically. The F-4F furthermore can now employ electro-optical ammunition, such as the Maverick.

The "Peace Rhine-Program" was completed in 1984; all F-4 aircraft of the Luftwaffe were converted. In the meantime, the F-4F formations have been able to gain experience with their modified and improved weapon systems.

A brief evaluation after completion of the weapon adaptation program shows that there is a definite performance increase in the air-to-air role. In the air-to-ground role, however, there are problems that spring from the inadequate performances of the inertial navigation system and the air data computer. There are no problems, on the other hand, in the employment of the Maverick.

In medium-range terms, however, the F-4F can no longer fully accomplish its mission with the existing avionic equipment and the armament in the air-to-air and air-to-surface sortie modes. Compared to the NATO fighter aircraft employed in Central Europe, the F-4F, with its present operational capacities, reveals a partly lower performance level even today.

Compared to the modern fighters of the Warsaw Pact, whose introduction is to be expected by the end of the 1980's, the F-4F would be inferior to a no longer acceptable qualitative degree unless corresponding measures are taken. These realizations and the resultant tactical gap until the introduction of the Fighter 90 led to the Luftwaffe requirement for a combat effectiveness upgarding of the F-4F. The main elements of this undertaking were expressed in the "Tactical Requirement" of October 1983. Specifically (Figure 2):

Integration of the all-weather-capable radar guided missile for medium ranges, the AMRAAM (Advanced Medium Range Air to Air Missile);

Installation of a highly modern radar unit which can fully utilize the performance capacity of the AMRAAM;

Exchange of the inertial navigation system and the air data computer.

Lifetime-prolonging measures are provided as a supplement to the combat effectiveness upgrading program. They are intended to guarantee the reliable operation of the weapon system for another 15 years until the tasks can be taken over by a more modern weapon system.

On the basis of the "ASRAAM/AMRAAM Memorandum of Understanding" of October 1980, the development of a new generation of air-to-air guided missiles is going on parallel to the F-4F combat effectiveness upgrading program. The United States has pledged to develop the medium-range radar guided missile

called AMRAAM, while the European program partners are developing the IR short-range missile called ASRAAM (Advanced Short Range Air to Air Missile). The AMRAAM program is in the "Full Scale Development Phase"; the Luftwaffe established its requirements in this connection in the October 1984 "Tactical Requirement."

The ASRAAM program began early in 1985. It is now in the definition phase. Regarding the time frame and the cost estimate, the Luftwaffe is confident that both programs are running according to plan.

Decisions in the Concept Phase and Definition Phase

The evaluation and selection of suitable avionic components were aspects of major concern here. The Luftwaffe's tactical and logistic requirements played a role here primarily. In addition there were cost aspects, modernity, and growth potential with a view to employment in the Fighter 90. After an intensive coordination process between the pertinent agencies of the Luftwaffe and the armament industry, the APG-65 of Hughes was selected as the best-suited radar unit. This is a piece of equipment which presently--and certainly for a long time to come--represents the most modern item available on the world market.

Plans call for this equipment to be built on a license basis by AEG [General Electric Company] in Germany.

Additional basic decisions were connected with the program's transition into the definition phase which began in March 1985:

Only the two fighter wings were equipped with the new radar for reasons of cost. There is however still a possibility of converting the two fighter-bomber wings also.

New inertial navigation systems and air data computers were built into all F-4F aircraft. The final selection of both units has been completed in the meantime. The inertial navigation system, which will have a laser gyro sensor, will be supplied by the firm of Honeywell, FRG, while GEC Avionics will deliver the air data computer.

The fire control system's computer capacity must be increased by one additional "Mission Computer" for AMRAAM employment. A computer made by LITEF was selected.

The concept of the firm of Frazer-Nash was picked for the development of the AMRAAM launcher.

The general contractor for all adaptation and integration work is MBB [Messerschmitt-Boelkow-Blohm]. It is expected that this firm--which has already handled the "F-4F Weapon Adaptation Program" to the Luftwaffe's satisfaction--will also carry out the present combat effectiveness upgrading program according to plan and successfully.

Current Schedule

On the basis of the decisions that were made, the F-4F combat effectiveness upgrading program's schedule features the following critical dates:

Start of development phase during 4th quarter of 1986;

Conversion of four F-4F fighter-bomber squadrons between 1989 and 1990-1991 and four F-4F fighter squadrons between 1991 and 1993. From that and from the planning dates for the Fighter 90 we can derive the statement that the modified F-4F aircraft will have a useful lifetime averaging 10 years.

Costs and Measures to Reduce Costs

The development costs are now estimated--that is to say, by the end of the definition phase and on the basis of relatively reliable information--at around DM400 million which must be funded in 1986-1992. The conversion costs for all eight squadrons of the F-4F force--that is to say, for 75 fighters and 75 fighter-bombers--will come to about DM950 million. This is a justifiable price in the light of the anticipated improvement of the combat effectiveness.

The combat effectiveness upgrading program essentially calls for the installation of highly modern but already tested components. A technical and deadline risk therefore exists only with respect to the integration of the components into the aircraft.

Compared to the equipment used until now, the new components have a considerably higher "Mean Time between Failure"--guaranteed by the producers--in other words, the statistically determined time between two technical failures. These figures point to an essential reduction in the weapon system's maintenance costs. For example, we can start with the idea that the APG-65 equipment preservation costs will be about one-third below those of the existing APQ-120 radar.

Beyond that, the high reliability values will have implications for the entire repair concept. This has cost-reducing effects even now during the development phase. Whenever individual components of the radar unit or even only the new laser navigation system and the Air Data Computer are no longer repaired by the particular unit, there is no need for developing any special testing instruments for the formations. The preparation of a corresponding expensive documentation likewise is now required only to a very limited extent.

The planned "lifetime-prolonging measures," such as the improvement of the airframe structure, the preservation of the ability to supply or exchange avionic components, as well as the continued ability to supply the functional equipment, are being carried out in coordination with the combat effectiveness upgrading measures. In budget terms, however, they must be viewed as an independent undertaking. The intended operational time span extension leads to a weapon system operating time of about 6,000 flying hours per aircraft,

as compared to the originally planned utilization of only 4,000 flying hours. Overall, as far as we know today, it will be necessary to allocate around DM100 million for these lifetime-prolonging measures. The necessary measures are being coordinated extensively with the USAF. Procurements are to be handled as much as possible jointly in an effort to reduce costs.

By way of summary, we can say that the F-4F combat effectiveness upgrading program is something the Luftwaffe cannot do without. If the planned measures cannot be implemented,

then the weapon system would no longer be capable of meeting the threat to be expected during the 1990's;

a reduction of equipment maintenance costs--such as the state of the art actually permits this--would not be possible and,

the weapon system's reliability and thus also availability would be critically low until the introduction of the Fighter 90.

Alpha Jet Capability Enhancement

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 496-498

[Article by Lt Col Peter Kothe (Gen Staff): "Alpha Jet Combat Effectiveness Upgrading"]

[Text] The tactical requirement for combat effectiveness upgrading was approved early in 1985 for the Alpha Jet weapon system after the rough outline of the technically doable and meaningful had been worked out during preliminary phase studies.

The original technical history is much more significant for the combat effectiveness upgrading program than it is in other weapon systems: the development objective for the Alpha Jet Program initially was a trainer which was to be equally suited for close air support sorties. As a result of the change in the priority of the Alpha Jet tasks--triggered by the change in the strategic concept of NATO according to MC 14/3--the Alpha Jet was to get simple equipment for the close air support mission, for example, a simple course gyro and a simple sight. This equipment however proved inadequate in the course of further definition and development against the background of the recognized threat and it was improved. A two-gyro platform was built in and a modern Head-Up-Display (HUD) as well as the installation of an ECM system were prepared.

The selection decisions for equipping the Alpha Jet had to be made within a time frame in which the technology was also undergoing rapid change particularly in the electronic and the electro-optical areas: accordingly, the Alpha Jet today has analog and digital technology, that is to say, the combined fire-control and navigation system (NavAttack-System) is not designed homogeneously and there are partly very clear quality differences in the sensors. The Head-Up-Display is an entirely modern system whereas the

two-gyro platform, from the current viewpoint, represents a technology that is on the way out because considerably greater accuracies coupled with better reliability can be achieved in laser-ring systems.

The technology, which is nonhomogeneous in the Alpha Jet, however is not sufficient reason for a combat effectiveness upgrading program. Instead, what is decisive here is the constant examination and review to determine whether the weapon system will be able to accomplish its mission also in the future in a changing threat scenario. It is not just that the enemy air defenses are becoming ever tighter and more effective; the real targets for the Alpha Jet on the battlefield attain ever faster mobility and, if the aircraft is to be employed effectively, require highly accurate weapon delivery from low-level flight and at some distance to the target. This is the only way one can, according to present-day estimates, achieve cost-effective employment to begin with, that is to say, with a tolerable cost-effectiveness ratio.

There are however some marginal conditions which are of special importance in connection with the improvements that must be planned:

The cost frame for development and procurement is tight.

The thrust-weight ratio of the aircraft must not become worse because an engine with a considerably more powerful thrust cannot be financed and will not be available within the desired time frame.

The existing good properties--maneuverability, simple handling, good maintainability--must not be impaired.

Main Requirements

All in all, this means that the changes concern mainly the NavAttack-System in order to improve the weapon useability and accuracy as well as the on-target effectiveness capacity. Weapon useability improvement here also means the enlargement of the weapon system's operational range in poor visibility and at night.

The Tactical Requirement for Alpha Jet combat effectiveness upgrading contain the following:

Improvement of air-to-ground action accuracy;

Improvement of air combat capability,

Expansion of operational range in poor visibility and at night,

Adaptation of modern armament,

Improvement of on-target effectiveness capacity through more effective self-protection.

Here, the last point, which essentially concerns the EW and ECM system, is developed as an independent piece of equipment so that it can be installed together with the other improvements.

The Tactical Requirement for Alpha Jet combat effectiveness upgrading reflects the overall spectrum of the improvements that are considered to be necessary; but, according to current estimates, it does not appear to be possible to make all changes contained in the requirement within the existing cost framework. Radical decisions will probably have to be made in the upcoming program phases--design and definition--in terms of a restriction to just a few changes, whereby changes with the most favorable cost-benefit effect must be given preference.

The Weapons

An improved 2.75" air-to-ground missile is being introduced independently of the Alpha Jet combat effectiveness upgrading program. Maverick in the B Version and/or D Version is to be adapted to the Alpha Jet as an air-to-ground missile which has been introduced in the Luftwaffe but which until now cannot be employed in the Alpha Jet.

The vertical on-board weapon, whose Tactical Requirement was approved almost simultaneously with the requirement for Alpha Jet combat effectiveness upgrading, is, to be sure, an across-the-board weapon but is primarily intended to expand the Alpha Jet armament spectrum.

The Short Range Antiradiation Missile (SRARM) and Short Range Stand off Missile (SRSOM) have also been planned for the Alpha Jet in the more distant future. Here, SRSOM is significant inasmuch as the new Alpha Jet Nav-Attack System must meet the stiff accuracy requirements for this weapon of the future.

For air-to-air combat, the AIM 9L guided missile, which has likewise already been introduced in the Luftwaffe, will be employed from a new weapon station on the wingtips. However, no change in the priority of mission assignment to the Alpha Jet is connected with this. The Alpha Jet is not going to be a "fighter" with emphasis on the helicopter engagement mission.

Navigation and Fire-Control System

One cannot draw a clear dividing line between the systems in the combined navigation and fire-control system. On the contrary: the avionic equipment should as much as possible be "cast of one piece," with optimum coordination of sensors and computers with each other. Now, as for the individual components:

Course and position reference. The existing two-gyro platform is to be replaced by a new system which certainly will meet the requirements for the accuracy of future weapons, for example, SRSOM. A decision as to whether the Doppler radar is to be eliminated in favor of a more accurate and above all lighter piece of equipment, must be made during the definition phase.

Rangefinder. As of now, there is no range-finding device for the Alpha Jet; at this time, the distance to the target is calculated. This method is not good enough for the required weapon employment accuracy. A laser rangefinder but also a small, pure range-finding radar would be conceivable as solutions here.

A smaller on-board radar--which, in addition to range-finding, would also be a sensor for night-time and poor visibility and which, under certain circumstances, could be used for the reliable identification of helicopters--is still being investigated although the Tactical Requirement for Alpha Jet combat effectiveness upgrading from the very beginning rules out any multi-mode-radar--perhaps for the F-4--for reasons of cost and weight.

Night Vision Aid. An expansion beyond the existing IFR restrictions is required for the operational action radius of the Alpha Jet. In addition to the previously mentioned on-board radar, it would appear that above all a modern forward-looking-infrared unit would be suitable because it supplies an image that hardly requires any interpretation, because it is not an active source of radiation and because it can also provide additional target assistance possibly with the help of special methods. Beyond that, the possibility of using a modern pair of night-vision spectacles for the aircraft commander is to be examined in the course of a demonstration program.

Stabilized Weapon Platform, External Load Management System. The stability of the weapon platform, in other words, of the entire aircraft, contributes considerably to the accuracy of weapon employment. In order to improve the latter, the existing yaw damping system is to be expanded into a three-axis damping system. Whether a management system will become required for external loads--and what kind of quality it might possibly have--is something that will have to be determined during the coming program phases.

Data Bus. Introduction of a mill-standard data bus is planned.

Head-Up-Display. The Head-Up-Display will presumably remain unchanged--already for cost reasons--naturally along with the change/adaptation of the programs and the software for the combined symbol generator/weapon computer, even though a holographic wide-angle Head-Up-Display would appear to be entirely desirable.

Additional Sensors. In addition to the previously mentioned major components, additional sensors, such as the pressure and angle detectors, must be improved or replaced, to the extent that they no longer meet the requirements addressed to the overall system in terms of accuracy and reliability.

EW-ECM System

The Alpha Jet force is currently being equipped with the first-step EW-ECM system as part of a retrofit program. The system is being improved in the course of a separate undertaking to reach the technical level of the 1990's. But this system likewise must be integrated into the overall system, above all because of the required indication and operating elements and the easy handling of the weapon system as a whole.

In addition to the improvement and expansion of the electronic system, work is being done to determine whether additional protective measures are possible in case of a recognized threat.

Miscellaneous Changes

From the general conditions described in the beginning, we can see that, in addition to the described changes, there can be only very little leeway for further improvements. For example, there will be almost no change in the basic design of the airframe especially since the aerodynamic performance figures continue to be good for employment in low-level flight.

A portion of unit tests however revealed the need for putting in a stalling-speed warning device. This, in the final analysis, is connected with an ergonomic revision of the cockpit design.

The short-takeoff and landing capability is to be further improved by means of a combination of the flap and aileron adjustment.

Whether the desirable single-part front disk will then still be affordable is something that the studies during the further program phases will have to tell us.

Program's Further Course

The additional program phases--definition and development--should be completed on time so that the real conversion process can begin in 1990-1991. The content of the technical changes to be carried out at that time will, in addition to the technical feasibility, depend quite essentially on the extent to which one can prove that the changes are in a reasonable cost-benefit ratio.

It is inconceivable and it is not practical or possible either to launch a program whose costs come close to the original procurement costs. Furthermore, in any case, one must evaluate not only the effectiveness of the Alpha Jet weapon system as such but always the connected employment of the weapon systems of the Luftwaffe, under certain circumstances, also the related employment of other weapon systems on the battlefield.

The highest goal of all of the Alpha Jet combat effectiveness upgrading measures--as is true generally of all programs--is to enable the weapon system to accomplish its share of the mission out of the total mission sphere of the Luftwaffe also in the face of a continually growing threat until the end of the anticipated operational service time.

Tornado Combat Effectiveness Maintenance

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 500-502

[Article by Lt Col Arnold Gassmann (Gen Staff): "Tornado Combat Effectiveness Maintenance"]

[Text] The Tornado weapon system was designed about 15 years ago as a special air attack multipurpose combat aircraft to be used against a broad range of point and area targets coupled with ECM. Its above-average on-target effectiveness capacity and its high survivability are based above all on its suitability for very-low-level ground-hugging missions at high speed and under all weather conditions. It was specially designed and equipped for this, with variable-geometry wings or terrain-tracking radar and an electronic flight control system with "fly-by-wire." By virtue of its special equipment for navigation (inertial platform, Doppler radar with second position and course reference platform), flight control (radar altimeter, terrain-tracking radar), as well as target acquisition and engagement (front radar), it assumed a night-time and all-weather employment and combat capability and reached a high degree of precision in the delivery of conventional weapons.

Government Agreement No 10 in 1976 marked the beginning of the trilateral production of 805 aircraft, the first series aircraft of which were accepted by the nations early in 1980. In the meantime, most of the IDS (interdiction strike) Tornado aircraft have been delivered; the development and procurement of an additional lot of ECR (electronic combat and reconnaissance) Tornado aircraft are being prepared (see the report in the next article) and more and more lessons are being learned after reassignment of the first operational wings.

The design status of the weapon system had to be "frozen" with the procurement of the so-called "long-running parts" and the start of production 10 years ago. But time has not stood still since then. The altered threat demands response lead times. Luftwaffe planning had to be adapted in many cases to financial, technical, and armament-industry changes as well as additional or expanded tasks with the pertinent new weapons. The rapid development of technology--in case of computer technology, this, for example, involves several generations--offers more effective and technically better solution possibilities for old and new problems. Its utilization is to serve above all to fashion the operation and maintenance of the weapon system over its entire lifetime in a more economical manner and to meet the operational requirements in a better and more reliable fashion.

Measures in a Weapon System's Life Cycle

The life cycle of complex airborne weapon systems, among which we must include the Tornado, spans more than 40 years counting from the start of development. Over such a long span of time, it is impossible for the military planner and design engineer reliably to project into the future all changes in military requirements and technological possibilities.

Evolutionary, sometimes also revolutionary changes in the enemy air attack and air defense potential demand adaptation and expansion of the militarily relevant performances of a weapon system to the operational requirements throughout the entire utilization phase in order at least to preserve and if possible even to improve the ability to accomplish the mission.

After the design state has been frozen, lessons are being learned constantly both during production and during the constantly growing operation of the weapon system and those lessons demand immediate measures or measures that can be planned in longer-range terms. They include, for example:

Measures to eliminate the danger to life and limb, that is to say, more safety for airborne as well as technical and logistic personnel;

Technical improvements in individual structural components to eliminate design and raw material weak points, difficulties in servicing, difficulties in equipment maintenance, as well as disproportionate operating or repair costs, that is to say, more economical operation and a higher availability level;

Adaptation to altered supply situations, legal provisions, changes at the NATO level or changes on the basis of bilateral or multilateral agreements, that is to say, likewise more economizing and greater safety in operation as well as higher availability and operational useability through standardization and interoperability.

These activities mostly involve measures that are being carried out as "technical changes in military equipment." They are being prepared as part of TLB (technical-logistic support) as well as ETB (development-engineering support):

Technical-logistic support is being carried out in the context of supplying the weapon system with spare parts as well as maintenance and repair with the objective of eliminating any kind of weak points that appear during actual employment.

Development-engineering support covers measures which are designed to secure the existing performance level in terms of development, measures which require engineering preparation and processing and which as a rule prepare the way for major changes. The latter are aimed more at increasing the performance capacity (combat effectiveness maintenance) or the utilization time of the particular military item (lifetime extension).

Up to a certain extent, ETB measures can still be carried out as "technical changes in military equipment."

As a rule, however, weapon adaptation and combat effectiveness maintenance programs must--because of their financial volume--be justified according to the principles of the General Armament Decree through a Tactical Requirement and must be handled as development and procurement undertakings.

In all of these measures, the very latest technologies are applied only if the desired improvement can be attained most economically with their help.

Initial Combat Effectiveness Maintaining Measures

After the freeze on the Tornado design state, the further development of the weapon system and the lessons learned from actual operations were constantly

fed into the system as part of the still on-going ETB program. By means of a government agreement, which included measures concerning ETB, the three program partners had pledged themselves to engage in joint coordinating conferences for the supply and support of the weapon system until the end of the production phase.

In addition, the Luftwaffe Operations Staff had at a rather early stage tackled the concepts about the further development of the Tornado and it was decided in August 1981, out of one big package of technical solutions, to implement those which:

eliminate known weak points or weak points arising in the course of operation,

improve the weapon system's survivability, and

help adapt modern ammunition to the Tornado and supplement the Tornado's armament spectrum with the goal of expanding the foul-weather combat capability against ground targets to include air targets in the near range.

The implementation of these concepts to this very day led to the so-called "1st Upgrade," which also includes the HARM-Integration that was completed in the Luftwaffe but that was also initiated by the Navy. The individual measures were developed above all in the context of development-engineering support.

The Tornado's avionics, designed 15 years ago, did represent the "utmost" in terms of aircraft avionics at that time but, in the light of present-day standards, would seem to date back to an "avionic transition period." The flight control system still works with analog signals. Because they were not yet available at the time, it was impossible in the Tornado to allow for any standardized digital bus systems (so-called MIL-Bus Systems) which combine all avionics and aircraft systems with each other in an optimum fashion. The entire computer and storage capacity is concentrated in one big central computer because this was the most cost-effective solution prior to the development of microprocessors. Besides, the computer does not employ any HOL (standard high-order language) but instead uses a special software which must again and again be adapted and carried forward and which does not make optimum use of the computer. Higher-order computer languages today are developed only so far that they could to the fullest extent be used at the earliest in the currently conceived aircraft of the next generation.

If one furthermore keeps in mind that, over the past 15 years, computer and storage capacities in a predetermined computer volume were multiplied only by about four orders of magnitude, then one can understand that the first combat-effectiveness-preserving measures start above all with the avionics of the Tornado; this is why they were also called "1st Avionic Upgrade" on a trilateral basis.

The completion of these measures by 1998 is probably the standard for the 7th-lot Tornado (ECR-Tornado) and also for all work yet to be done on the 1st to the 6th lots (IDS-Tornado).

Tornado at the End of the 1980's

The so-called 1st Avionic Upgrade above all comprises the integration of the HARM (High Speed Anti Radiation Missile) air-to-ground missile to engage radiating targets and measures to improve the on-target effectiveness capability and the self-defense capacity of the Tornado. This also improves the action effectiveness of the individual mission and the reduction in the loss rate increases the number of available Tornado sorties over a certain conflict duration.

HARM integration calls for increased computer and storage capacity, partial introduction of a MIL-BUS Ssystem (standardized digital data transmission), a standardized interface to the weapon (HARM), as well as standard input places for operational data and software programs.

On-target effectiveness capacity and self-defense capability are enhanced through increased processing of radar data, introduction of a "Threat Avoidance/Terrain Masking Mode" (avoidance of threat, for example, by flying around AA artillery and AA missile systems; utilization of terrain masking against ground-based active radar sensors), improvement of acquisition, deception, and jamming of enemy threat as well as operation of radar altimeter that can be acquired as little as possible.

The operational benefit deriving from individual technical measures which are closely intertwined can be evaluated only as part of a general overview and looks something like this:

The implementation of MIL BUS 1553 A, of the 128-KF (Kilobyte with Floating point) main computer with the improved SS8 software, the missile control system with preparation for a higher-order computer language (HOL = high order language) ADA, the data acquisition computer (processor), the SMS (Stores Management System) 90, the GLU (Ground Loader Unit) to put software programs in, and the MDTS (Mission Data Transfer System) for putting in mission data bring the following about:

improved serviceability of software,

(simpler) adaptation of new smart weapons and tactics,

improved flexibility and serviceability (for example, through surveillance of engine data) and

(additional) growth potential.

Improvements of the terrain-tracking radar and the fight control system (automatic flight director system) as well as the introduction of the "split axis system" and a low-radiation radar altimeter facilitate the following:

flying with automatic altitude maintenance along with free roll axis for input of data by the pilot and

improved curve flying ability with increased flexibility for evasion and terrain masking maneuvers, as well as

reduced radiations, for example, for "silent attack over water."

The improvement of data processing in the radar through greater storage capacity and higher computation speeds, as well as a change in the software, to facilitate air-to-air target search and to increase the radar ranges (LRU 1-Upgrade) (line replaceable unit), make it possible to ensure:

that air-to-air missiles with a range beyond visual range (for example, ASRAAM) can be employed against enemy fighters.

Warnings against jamming transmitters, increased resistance of the terrain-tracking radar against jamming units as well as improvement of radar warning and ECM make it possible to guarantee that:

the on-target effectiveness capability in ground-hugging flight and

the detection and response capacity can be improved against the enemy threat.

All measures under the 1st Avionic Upgrade are trilaterally coordinated.

Look into the Future

By means of the measures of the 1st Avionic Upgrade, the Tornado is being adapted, until the beginning of the 1990's, to the altered threat, to additional tasks, and to new possibilities for increasing availability and the sortie ratios.

In view of the anticipated operational employment duration beyond the year 2010, the combat-effectiveness-maintaining measures carried out as part of the 1st Avionic Upgrade however would not appear to be the last measures of that kind.

Even today it follows from the present-day armament planning of the Luftwaffe that a larger number of the most varied air-to-air and air-to-ground weapons must be adapted to the Tornado over a period of more than 10 years. In this group, several weapons have not yet been definitely defined according to size, weight, and requirements for the delivery vehicle. For cost reasons, however, we can no longer carry out comprehensive weapon adapation programs, such as they were customary in the past for each newly introduced weapon.

Instead, one could create the basic prerequisites for a reasonably priced implementation of all foreseeable weapon adapation and combat effectiveness maintenance programs with the help of a comprehensive combat effectiveness maintenance program which, by means of specifically target-oriented action and supplementation in the case of sensors, avionics, and cockpit design, would improve the specifically type-related and fundamental properties of the system if possible by one generation jump. This step roughly corresponds to what in the Anglo-Saxon area is called Midlife Improvement (MLI) or half-time

intermission modernization. This will be a task for the three Tornado partners during the 1990's.

Electronic Warfare, Reconnaissance Tornado

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 504-507

[Article by Commander Helmut Binder: "ECR-Tornado--Electronic Combat and Reconnaissance Tornado"]

[Text] When the MRCA (Multi-Role-Combat Aircraft) was "laid down" by Great Britain, Italy, and the FRG, the three partner countries, the common goal was to create an aircraft for the fighter-bomber, air superiority fighter, and reconnaissance roles. The "Tornado" MRCA was built in the IDS (Interdiction Strike) version and as air defense variant in the F-2 version for Great Britain, in addition.

A reconnaissance package was built for the West German Navy in the form of role change equipment in an external pod which was specially tailored for the requirements of the naval air units (high-resolution aerial cameras and IR photo camera).

Later on, Italy procured a limited number of these reconnaissance pods for the maritime missions of the Italian air units in the Mediterranean. The RF-4 aircraft were and are available for the Luftwaffe's reconnaissance role with the equipment that was proper for the particular mission. The constantly growing need for reconnaissance however led to the requirement for an increased reconnaissance capacity during the 1990's.

Because the production of the RF-4E Phantom aircraft has been discontinued for quite some time now, there is no possibility for re-procurement in order to replace the losses or in order thus to increase the reconnaissance capacity. This is why, starting with the early 1980's it was necessary to think about supplementing the declining reconnaissance capacity. In the meantime, the Tornado began to prove itself in the wings as outstanding delivery vehicle for the most varied assignments.

In this situation it was necessary and logical that the Tornado should also be included in the analyses to close the emerging reconnaissance capacity gap in the 1990's. The positive results of the feasibility studies made by industry and the definite advantages deriving from an introduced weapon system pointed to the idea of meeting the requirements through a special Tornado version as the most economical solution.

The enemy air defense potential, which keeps growing in terms of quantity and quality, calls for means capable of countering this threat and thus ensuring the on-target effectiveness capability of our own air units. New technologies in the EW secotr and the introduction of modern anti-radar guided missiles are suitable for minimizing the effect of enemy radar-based air defense weapon systems. What would be more obvious than to apply these technologies also in this special Tornado version according to the old economic principle of multiple use of delivery systems.

The integrated solution of engaging and suppressing enemy radar-based air defense installations (Suppression of Enemy Air Defense--SEAD), on the one hand, and tactical penetrating conventional/electronic reconnaissance, on the other hand, led to the definition of the ECR-Tornado. The SEAD component of this weapon system was optimized in terms of the selective effect against mobile targets.

The ECR-Tornado is mostly identical in terms of construction with the IDS version, including the HARM (High-Speed Anti-Radiation Missile) capability as regards the airframe, engines, and a large portion of the avionics. With the exception of the two 27-mm cannons, the ECR-Tornado basically has the ability to cover also the IDS action spectrum.

The special equipment of the ECR-Tornado however in addition facilitates the location, recording, transmission, and engagement of radar targets as well as tactical reconnaissance with IR sensors. An advance analysis possibility on-board and instant forwarding of target data permit cooperation with other air attack forces and facilitate the immediate engagement of high-grade targets within a critical time frame in the context of combined air warfare operations.

ECR Equipment--Emitter Locator System (ELS)

Modern digital technology makes it possible today to develop equipment with which one can not only acquire and identify radiating targets as well as take bearings on them but with whose help one can also locate them. Such an instrument, called an "Emitter Locator System," will be the very core of the "electronic combat" component of the ECR-Tornado.

In combination with the Tornado's navigation system, it is possible to determine the location of radiating targets, such as, for example, air defense positions, with adequate accuracy, in order to jam those targets in a specifically oriented manner by means of electronics or to engage them actively with the help of HARM. The transmission of target coordinates to following fighter bombers could be used by them in order to fly around enemy air defense positions or to engage them. Finally, the stored report or the report which is forwarded during the actual sortie and which concerns a hitherto unrecognized "radiation source" is an important piece of information for updating the situation by the competent headquarters and units.

ELS, in cooperation with HARM and other active and passive EW equipment, is therefore the instrument with which the ECR-Tornado gets the capability of engaging or neutralizing mobile or fixed enemy air defense components.

Another aspect of the ECR-Tornado's effect must now be mentioned here; that applies not only to mobile but also to fixed air defense systems: an enemy air defense system, which depends mostly on radar information, is forced to use its radar sensors with certain time interruptions solely by the possibility of being destroyed while it radiates actively; this is connected with a temporary compulsion to get along without information and that means a loss of effectiveness.

Displays

Through the ECR sensors, the crew gets additional information which must be posted, evaluated, and analyzed. In order to arrive at decisions that will be proper for the particular situation in a short time and with a large volume of data, the crew must have a properly working display system. The Tactical Situation Display will make it possible to interpret the illustrated situation as quickly as possible and correctly as well as to initiate the necessary measures. In the display field, digital technology has also made tremendous progress since the definition of the IDS equipment family.

The new technology makes it possible automatically to compress data and partly to assign them certain priorities so that data essential for the mission will not be lost to the crew in spite of the large volume of information supplied.

IIS-Infrared Imaging System

The main equipment item for the reconnaissance component of the ECR-Tornado is the IR line scanner. The sensitivity and the resolution capacity of currently available IR units are roughly comparable to those of conventional photography. The advantage therefore however lies definitely on the side of IR technology because, being independent of visible light, it facilitates reconnaissance during the day and at night and under visibility-restricting conditions along with image confirmation.

The use of dry-silver film as photography medium permits the immediate viewing of the films because they are "developed" thermoelectrically and because they can be directly transferred to a TV-TABS via a video camera. By means of mechanical-electronic control, it is possible to generate stills, slow-motion, and enlarged pictures which facilitate a rough interpretation of the reconnaissance results by the WSO (weapon system officer). The precision interpretation of the film material is accomplished after the mission by correspondingly trained personnel on the ground.

Operational Data Interface (ODIN)

With the ELS and the IR line scanner, on the one hand, and the new display possibilities, on the other hand, the ECR-Tornado crew has a comprehensive and almost real-time picture of the situation. These valuable information items must also be capable of being made available to other, immediately following operational units that do not have modern sensors, either to warn them against certain threats along the planned flight path or also for target assignment or "last minute update" regarding their target. The Operational Data Interface establishes this link.

Preformated alphanumerical messages can be transmitted via radio to the display instruments of the following correspondingly equipped fighter bombers and can be analyzed and used there. Other recipients of these reconnaissance results, for example, army units or situation centers, are conceivable, assuming they have the corresponding equipment and the necessary relay stations. The ECR-Tornado therefore increases the success probability and effectiveness of other

formations with the help of its ability to transmit reconnaissance data to other recipients.

Forward-Looking-Infra-Red (FLIR)

As a result of increasing experience deriving from Tornado-IDS flight operations, the terrain-following radar (TFR) is proving itself increasingly and crews are getting use to a "new dimension" in flight training operations. Although there is today as yet no practicable alternative to the TFR for foul-weather missions, we are aware of the weaknesses of this system. By virtue of its active radiation and because of the external jamming possibilities, the TFR will in the future lose some of its combat value. There is a worldwide research and development effort going on as regards technical solution possibilities for so-called "silent operation," that is to say, very-low-level flight navigation without compromising radiation. A ready solution however is not in sight for the next decade.

A compromise solution to reduce TFR use therefore is a forward-looking IR system which, at least in darkness and during visibility-restricting weather conditions, will conditionally permit low-level flight navigation according to quasi vision and doing without the actively radiating radar altimeter or the TFR.

The IR image is displayed on the scannable Head-Up-Display of the ECR-Tornado and is superposed with the necessary flight control data. This enables the aircraft commander to make visual corrections at least at decisive points along the way or also during the final approach to the target. Low-level "silent operation" is reported to be possible even over longer distances above relatively flat terrain.

FLIR however can also be used at night as additional reconnaissance sensor for advance target assignment for the IIS and for precise target acquisition prior to weapon employment.

The sensors and display units described are integrated into the avionics structure of the ECR-Tornado and are connected with each other via a central data bus; data exchange among the various computers is possible.

The HARM is tied in the same way. In this way, the target data of the ELS can be forwarded to the HARM, and data from the HARM search head can be processed in the on-board computer systems. This system complex gives the crew an opportunity to respond extremely flexibly, depending upon mission and threat.

The ECR-Tornado will not only close the quantitative gap in the reconnaissance capacity of the 1990's. The quality of reconnaissance is improved and the RF-4E weapon system is meaningfully supplemented by the selection of the most modern sensors, image recording techniques, and data processing possibilities.

The ability to locate enemy radar-based air defense systems with the help of the ELS and to engage them with the HARM either alone or in conjunction with other fighter-bomber units closes a gap which until now could not be closed because of the absence of suitable instruments and systems.

ECR-Tornado combines the SEAD tasks and penetrating tactical air reconnaissance into one weapon system. Moreover, ECR-Tornado can also be used in the IDS role when necessary. The fact that the delivery aircraft is an introduced weapon system facilitates the inclusion of the ECR-Tornado in the logistic and personnel structure of the Luftwaffe which thus gets an extremely efficient weapon system.

RF-4E Combat Effectiveness Upgrading

Frankfurt/Main SOLDAT UND TECHNIK in German Sep 86 pp 508-511

[Article by F.B.: "RF-4E Weapon System Combat Effectiveness Maintenance--Necessary Changes in Luftwaffe Tactical Air Reconnaissance"]

[Text] The introduction of the RF-4E weapon system into the Luftwaffe was closely connected with the switch to the "flexible response" strategy. On 13 May 1968, the federal defense minister informed the chairman of the Defense Committee of the Bundestag [Lower House] that he intended to procure 88 RF-4E Phantom II reconnaissance aircraft to bring about a qualitative improvement in the Luftwaffe's reconnaissance capability, especially for sorties at night and under foul-weather conditions. The defense committee and the budget committee of the Bundestag agreed to this proposal in October or November 1968. The first aircraft were delivered to the units in January 1971.

During earlier years, technical development in the field of optronics and radar made available reconnaissance sensors which, as part of the "flexible response," in particular met the higher requirements regarding versatility and quality of reconnaissance performance. Accordingly, the RF-4E was already equipped with:

IR line scanning equipment which delivered aerial photos with high image-rendering quality independently of natural or artificial lighting, and with

Side-looking reconnaissance radar which--extensively independent of the weather--permitted large-surface, fixed-target and moving-target acquiring terrain coverage from high flying attitudes and from low-level flight.

Since then, the operational concept of reconnaissance and technology developed further: this led to a more profound understanding of the conceptual principles of tactical air reconnaissance and the multiplicity and quality of resultant requirements; but it also led to improved or novel technical possibilities for accomplishing the assigned tasks. On the other hand, quite a few developments, brought about by the employment of the weapon system, have become clear in the meantime and their consequences have turned out to be definitely foreseeable, such as, the gradually declining aircraft inventory resulting from losses during practice flight operations and, deriving from that, the reduction of the reconnaissance capacity or the emerging need to replace aging system components and systematically to watch the resistance of the airframes.

These developments decisively contributed to Luftwaffe planning in shaping its tactical air reconnaissance during the 1990's.

Starting Situation--Planning Approach

Toward the end of the 1970's the Luftwaffe undertook systematic investigations dealing with the type and scope of the delivery vehicles required during the 1990's. An equipment gap was recognized for the tactical reconnaissance area on the basis of a model illustration of an overall system for reconnaissance ("Tactical Reconnaissance System 90"). This gap was due to the following:

a quantitative shortage that is determined by the rising reconnaissance requirements and the simultaneously declining inventory of RF-4E reconnaissance aircraft and

a qualitative deficiency resulting from the comparison of currently available and future required abilities to accomplish reconnaissance tasks.

The estimate of the future reconnaissance need and the capabilities required to meet it was based especially on a prognosis of the development of the enemy strength potential and an analysis of the future significance of engaging enemy ground forces deep in enemy territory within the context of conventional overall warfare ("interdiction," later especially called "second echelon interdiction" and finally "follow-on-forces attack" or FOFA).

Investigations on the possible retention of the RF-4E weapon system in service in the meantime showed that the maintenance of operational readiness beyond the 1990's is possible at a reasonable cost. On the basis of these findings, the overall solution approach to closing the mentioned equipment gap was worked out as follows:

Introduction of a new airborne weapon system in limited numbers (ECR-Tornado) and

Retention and qualitative improvement of the RF-4E weapon system.

Tactical-Semistrategic Requirements

In the following, we will pick out some striking examples from among all of the tactical-semistrategic requirements that springs from the adaptation of the RF-4E weapon system to future operational requirements and conditions. These are requirements which result in terms of

the on-target effectiveness capability,

the technically determined reconnaissance performance and

the time factor in the reconnaissance cycle.

Increasing the On-Target Effectiveness Capability

The ability to prevail against the threat from ground-based and air-based weapon systems of enemy air defense is an existential necessity for all combat and reconnaissance aircraft that must operate within the action radius

of these weapon systems. In the course of reconnaissance sorties, we face the task of penetrating the air space that is dominated by the enemy, reaching and reconnoitering the specified targets, and returning to our own operational base with the information gathered. On-target effectiveness capability is therefore an elementary requirement for accomplishing the operational assignments and, beyond that, for the possibility of enduring flight operations under wartime conditions over a longer period of time also with tightly restricted resources.

The technical foundation of the on-target effectiveness capability in combat and reconnaissance aircraft is represented by equipment with radar warning instruments, electronic jamming transmitters, as well as chaff and IR deception devices; these technical means are combined to increase the overall effectiveness with the help of tactical operating methods.

The current capabilities of enemy air defense and their foreseeable future development are cause for a further modernization of the technical delivery vehicles and at the same time also for a review of the operational prerequisites and principles. The following has resulted from this as far as the RF-4E weapon system is concerned, among other things:

The prerequisite for the effective use of technical possibilities and tactical methods consists of timely, reliable, and complete information on enemy air defense weapon systems and their deployment in the operational area of our own forces.

These information items must be obtained by reconnaissance resources specially designed for this purpose and they must be made available to all users as quickly as possible.

Information on enemy air defense weapon systems is used in programming our own warning and jamming equipment in keeping with the threat, on the one hand, and, in the context of mission planning, on the other hand, to report the action sectors of ground-based air defense weapon systems through corresponding flight path planning, considering concealment opportunities provided by the terrain. For this purpose, it is necessary to determine the extent of these action sectors as a function of the structure of the surrounding terrain.

Rapid and reliable mission planning, considering the current threat, requires a switch to EDP-based planning methods. The equipment necessary for this must be connected to the corresponding information distribution process.

Site location and the determination of the boundaries of the action sectors of ground-based air defense weapon systems that are determined by the terrain must necessarily be accomplished with a high degree of accuracy. In order actually to be able to track the flight path that was planned on the basis of these fundamental data, the navigation system in the aircraft must work with proper accuracy and reliability under all operational conditions.

The accuracy and reliability of the on-board navigation system must be increased commensurately. In addition, it is necessary to provide a reliable

transmission possibility for the results of EDP-based mission planning between the latter and the on-board navigation system.

Operational sorties at night and during foul-weather conditions are hardly conceivable at this time without the use of the on-board radar. On the other hand, an activated on-board radar can be acquired and destroyed already at greater ranges. The necessity of avoiding this risk without in the process critically restricting our own operational possibilities leads to the requirement for an alternate solution.

By way of supplementing the on-board radar, it is necessary to introduce a passive sensor for flight control and navigation at night and under visibility-restricting weather conditions.

Improvement of Technically Determined Reconnaissance Performance

Improvement measures in the performance area of reconnaissance are generally aimed at making the most complete, reliable, and uptodate possible reconnaissance results available at the right time.

Completeness and reliability as well as limited acceleration of the information flow between picture-taking by a reconnaissance sensor and the result message are determined by the technical design of on-board reconnaissance sensors and ground-based installations for air photo interpretation and reporting. Improvement measures in the performance area accordingly can cover all of these components (hence also the term "RF-4E weapon system combat effectiveness maintenance") and are not confined only to the aircraft itself. An analysis conducted for this area of technically determined reconnaissance performance yielded the following:

The ability of a reconnaissance sensor so to depict a target object that it can be reliably recognized again in the aerial photo among other things depends on the possibility of compensating the actual apparent target movement which the sensor can perceive. This ability was restricted in boundary areas of hitherto possible operational flight profiles (low-level, high-speed flight). An enlargement of these boundary areas will become possible through innovation measures in the general avionics field.

The performance capacity of imaging reconnaissance sensors must be adapted to the limits of future useable operational flight profiles.

Tactical air reconnaissance among other things must be carried out also at night. For reasons of the required image quality, it was impossible here to get along without the use of conventional aerial photo equipment for the visible spectral range. Here it was necessary to use pyrotechnical illumination devices, so-called flash cartridges. The potential threat to maintenance personnel and the environment, the impairment of the on-target effectiveness capacity resulting from the flashes that could be seen far and wide, and, last but not least, the rather limited effectiveness of these illumination devices provided grounds for the investigation of possible alternatives already during the 1970's. Now technical development in the field of IR technology is moving within reach of such an alternative.

The sensor equipment of the RF-4E must be so designed in the IR range that the image reproduction quality and the surface coverage will be up to the anticipated reconnaissance missions.

Aerial photo interpretation is a function within the overall course of reconnaissance sorties that decisively helps determine the success of the mission. The technical facilities for aerial photo processing and interpretation available to the reconnaissance wings were taken over during the introduction of the RF-4E weapon system in the same way as they were used by the USAF since the early 1960's. These instruments were soon no longer able, without restrictions, to meet the qualitative and quantitative requirements for aerial photo interpretation which had gone up following the introduction of the RF-4E; the heavy workload for photo interpreters resulting from the technical design and development of interpretation work stations, particularly during longer-lasting assignments, resulted in considerable fluctuations in the reliability and completeness of interpretation results. The results deriving from purely manual methods in the determination of target coordinates, in aerial photo surveying, and finally in the drafting of result messages had to be evaluated in a similar manner. These discoveries were in existence already during the late 1970's and had been confirmed by unit experiments; but the technical prerequisites required for problem solution were initially still missing. Only the dynamic development on the computer market and the interest in solving such problems which in the meantime had definitely increased also in other air forces set a technical development in motion with the aim of facilitating the implementation of current requirements for aerial photo interpretation systems that would meet the requirements. This led to the following approach:

To guarantee reliability, completeness, and speed of interpretation even when photo interpreters are on longer-lasting assignments, it is necessary:

to provide separate work stations for the "analysis and report drafting" and "control and communication" functions;

the interpretation work stations for teams of two interpreters, each, must be so designed that all work steps can be performed both jointly (for the sake of reliability) and independently and separately (for the sake of rapid processing);

it is furthermore necessary to facilitate quick access to and immediate illustration of reference material;

the discovery and recognition/identification of targets by means of computer-aided image processing must be supported;

computer support for coordinate determination, as well as surveying and computer operations and for report preparation must be provided.

Improvement of Time Factor in Reconnaissance Cycle

The concept of reconnaissance cycle refers to all of the activities and events which one must go through on the way between the reconnaissance requirement

and the moment the requirement is met (Figure 3). Starting with a reconnaissance request, this route leads via sortie order, flight planning, flight to the target, and sensor use back to the operational base in order, via interpretation and result reporting, again finally to wind up with the requester.

The time for one run through the reconnaissance cycle is the reconnaissance time; it is a measure of the response capability of the manpower and resources cooperating in the reconnaissance cycle. The time for the cycle segment from target acquisition (Time over Target-TOT) until the requester has the result message is considered the age of the information; it is a measure of the time-dependent utility value of a result report.

During the years since 1977, measurement programs were carried out in the context of the annual NATO autumn maneuvers in order to get an idea of the time factor in the entire reconnaissance cycle. Here, the introduced methods and reporting channels were considered first of all and, after the availability of adequate findings, model solutions were also taken up with the objective of systematically and radically reducing the reconnaissance time and the information age. The results of these investigations in the meantime have come to form an efficient statistical base for the analysis of the different possible solutions. Accordingly, we get the following approach:

The by far greatest time requirement comes during telecommunications traffic between requesters, sortie control, and reconnaissance unit, as well as between reconnaissance unit and the addressees of the result report. This is brought about, on the one hand, by passing orders and messages on as if in a bucket chain and, on the other hand, by the fact that available telecommunications channels are not to be found at these intermediate stations at all times so that there are considerable waiting times. Accordingly, the smooth handling of telecommunications traffic in the context of the reconnaissance cycle requires a solution that avoids both of these disadvantages.

Reconnaissance requests, the employment of reconnaissance units, and the result message must be handled via the EIFEL command and information system.

The next possibility that is interesting in terms of the size of the potential time gain is the direct transmission of image data from reconnaissance aircraft to the aerial photo interpretation stations. For the frequencies that are suitable for a quick transmission of corresponding data volumes one must however have "visual connection" between the sender and the recipient. For data transmission from low-level flight it is therefore necessary to create relay installations at higher altitudes, that is to say, in aircraft or in satellites. These facilities would in each case have to make several transmission channels available that would resist ECM and they would have to be maintained if possible without any interruptions. The construction of such relays however would be possible only with a great expenditure. A by far less expensive solution option is based on so reducing the data volume to be transmitted by means of on-board "preliminary processing" that transmission in a frequency range with a more favorable propagation characteristic and therefore without relay will be possible.

On-board "preprocessing" of aerial photos is handled by the combat observer in that, by means of on-board reproduction, he discovers targets that were acquired by the reconnaissance sensors, that he recognizes and locates them, and that he sends the information thus obtained via the on-board radio (in-flight report).

The resultant data volume no longer contains any dead information items but already "finished" information. To be sure, the human information processing capacity limits the effectiveness of this method in quantitative terms and thus restricts it to those cases in which information is particularly critical in terms of time; this method however offers the advantage that such reconnaissance results can reach the requester directly without detour via special interpretation components.

Outlook

"RF-4E Weapon System Combat Effectiveness Maintenance" is a concrete undertaking in equipment planning and is presently on the way to the "Tactical Requirement." The improvements of existing capabilities and the creation of new capabilities, which are becoming necessary from the military viewpoint, emerge ever more clearly and the blending of technical solutions with the time and money requirement for implementation keeps making progress.

On the whole, it is to be expected that the Luftwaffe's tactical air reconnaissance, after completion of this undertaking, will also meet the requirements that may arise from a changing operational environment and from future operational demands placed upon it.

5058
CSO: 3620/27

MILITARY FEDERAL REPUBLIC OF GERMANY

LUFTWAFFE GENERAL VIEWS NATO AIR DEFENSE REQUIREMENTS OF 1990'S

Stuttgart FLUG REVUE in German No 8, Aug 86 pp 18-19

[Article by Major General Eberhard Eimler, Luftwaffe inspector general: "The Luftwaffe in the Year 2000"]

[Excerpt] The road to the transition into the next millennium contains a host of challenges. The cornerstones of Luftwaffe planning are the growth, unfavorable to the alliance as a whole, of the threat from the Warsaw Pact forces and--derived from that--the operational-strategic capabilities that NATO forces must possess within the framework of their "flexible response" military strategy.

Nuclear weapons will continue to be part of the power triad of NATO. However, the priority goal for joint planning in the alliance is to strengthen the conventional combat capabilities of our forces so that recourse to atomic weapons can be avoided in the event of a conventional attack. For this task, three especially important conventional combat requirements must be accomplished in central Europe: defensive and offensive combat against Warsaw Pact air forces, combat against hostile ground forces on the battlefield, and combat against subsequent enemy forces beyond the battlefield. Important tasks within the framework of these key objectives have been assigned to the NATO air forces.

When the Battle Starts, Full Force Is Required Immediately

By developing its combat power, the Luftwaffe must make sure that it can cope efficiently with the tasks assigned it within the overall plan for forward defense. In order to enhance the Luftwaffe's capabilities, long-term scaled acquisition priorities must therefore be established using available resources, especially in the fields of reconnaissance and command, air attack and air defense.

NATO is a defensive alliance, that is, the enemy determines the timing, place, and dimension of its attack. Warsaw Pact air forces are in a position to carry out surprisingly massive and far-reaching air attacks. The major goal is to neutralize NATO air forces at the very beginning of a conflict and then to fully exploit the superiority of Warsaw Pact ground forces with the protection and the support of this acquired air superiority.

In the future we will need to have even more capabilities to prevent the attacker from exploiting the element of surprise, which will allow us to take the initiative shortly after the attack.

Thus, NATO air combat forces are immediately required to be in full force at the beginning of an attack.

The movements and intentions of Warsaw Pact air and ground war forces must be followed even in peacetime through far-reaching, gap-free, up-to-date reconnaissance, and through increased expenditure in times of crisis and war. We must be ready at any time to transform this knowledge, within a strong, flexible command system integrating national and NATO lines of command, into decisions that conform to a given situation and thus to direct combat forces.

Both national and NATO planning take into account the growing importance of reconnaissance and command. The Air Command and Control System (ACCS) and the Battlefield Information Collection and Exploitation Systems (BICES) are important NATO programs for this for the 1990's. The air force will continue to expand its EIFEL computer aided command and information system, its subsystems, and the related modern communications systems. Our telecommunications and electronic reconnaissance will expand its capabilities in fixed, mobile, and airborne applications through high performance, long distance reconnaissance systems.

The ECR-Tornado will considerably reinforce its powerful reconnaissance capability, especially for joint air warfare operations. All these programs make it clear that we intend to enhance the efficiency of the Luftwaffe through distinctly improved task accomplishment in reconnaissance and command. In terms of reinforcing the conventional defense capabilities sought throughout the alliance, we must be able to deploy our limited combat resources against the target with great efficiency at any time depending on the circumstances.

This is true for all combat tasks. The beginning of the 1990's marks the start of the long overdue improvement of air defense capabilities. The main areas of acquisition start with the addition of the PATRIOT and ROLAND air defense missile systems. The ROLAND physical defense system will considerably improve the survival capability of our air forces. The combined action of PATRIOT and HAWK can increase the flexibility, mobility, and firepower of air defense in the short term to balance the threat. In the long run, however, it must be assumed that the threat from precisely deployable airborne and ballistic missiles with conventional warheads will increase.

This Warsaw Pact deployment option, directed mainly against the nuclear forces of the NATO air forces, threatens our reaction capability. To me, this development means that the deployment range of integrated NATO air defenses must be gradually expanded because we must be able to establish the air superiority necessary for rallying and staying power in the forward defense even in this new threat situation. Therefore, there is a constant need to secure the entire airspace through a system of overlapping air and ground supported weapons and guidance systems. Fixed, mobile, and airborne radar sensors are therefore being integrated into an air defense command system network with high early warning and guidance capabilities.

Planning for the development of a tactical air defense system with the necessary attack capability against Warsaw Pact unmanned air attack systems has

begun, as has planning for the fighter plane 90. Both systems are required by the end of the 1990's as the final components of the comprehensive improvement of NATO air defense. Then the Luftwaffe will have the air defense fighting power to cope with anticipated air warfare conditions in central Europe with rapidly changing centers of action, high target density, and combat intensity.

Because of these operational conditions and because of its ability to carry out escort missions and fighter attacks within joint air warfare operations, the manned fighter plane will maintain its role as a far-reaching, flexible defense aircraft capable of crucial operations for area and for flank protection far into the 21st century.

Efficiently Delaying the Fighting Strength of the Enemy

Also regarding air attacks, in the long run the manned aircraft will have to bear the heaviest load of the combat task because of its broad deployment range and its flexibility. Continued development of tactical capabilities in air warfare is critical in this sense. We must enhance the operating efficiency of our air forces through central command and massive concentration of our forces against the operational-strategic targets of the enemy.

These targets already are within the reach of NATO air forces. We must expand the combat capabilities of our air forces to the point that the combat power of Warsaw Pact ground and air forces, attacking from a long distance, is already effectively worn down prior to reaching the battlefield or NATO airspace, or their deployment is efficiently delayed. This would have a beneficial impact on the power relationship both during combat by NATO ground forces on the battlefield and during combat of NATO air forces in a favorable air situation.

After delivery of the IDS and ECR Tornados is completed, the Luftwaffe will have a deployment range with all its fighter planes.

In this connection I would assume that in the 1990's technological development will have progressed to a point where we can raise the penetration capability of our air warfare operations by acquisition of highly efficient ammunitions with long range capability. It will then be possible to fight with greater intensity against the entire echeloned disposition of Warsaw Pact ground and air forces over long distances, especially against mobile targets, on the basis of up-to-date reconnaissance results. The combination of efficient reconnaissance and guidance with penetrating aircraft and ammunitions will enable us to exploit fully the potential of the air force even under the more demanding combat conditions of the year 2000 and beyond.

The defensive and offensive fight against Warsaw Pact air warfare potential and the battle against Warsaw Pact ground forces in the rear have growing relevance for the staying power of all NATO armed forces operations in the face of central European power relationships, which are unfavorable to NATO. Therefore, these are the key issues for the necessary strengthening of the conventional defense capability of the alliance which is essential for enhancement of the conventional deterrent impact of our forces.

The objectives ahead of us, up to the year 2000, will not be easily achieved. The scarcity of financial and personnel resources, on the one hand, and the technological risks yet to be overcome in the development of the necessary weapons systems, on the other, require great efforts everywhere, inside and outside the air force.

However, the Luftwaffe, as an important partner in the air forces planned for central Europe's forward defense, must make a major contribution, commensurate with the operational-strategic goals of the alliance, to the penetration capability and, hence, to the deterrent effect of the alliance's "flexible response" strategy. We must be prepared to meet this responsibility with all our might.

8617/12859
CSO: 3528/M247

MILITARY SPAIN

PRIVATE FALLOUT SHELTERS PREDOMINATE IN CATALONIA

Barcelona LA VANGUARDIA in Spanish 4 Sep 86 p 23

[Text] Eighty Catalonian families have installed single-family nuclear fallout shelters in the garages, basements, and yards of their homes, with a capacity of approximately 3,000 persons.

Situated in the suburban residential areas of Barcelona or near the largest towns, many of them are located in the second home of the person who built them.

According to Antonio Alcahud, the manager of a company that specializes in their construction, there are three very different types of customers in Catalonia: one consists of very wealthy people between 60 and 65 years of age with large families; another is the small merchant, businessman, or professional from the upper middle class around 50 years of age; and finally, there is the younger customer, around 40 years of age with small children, who takes advantage of the construction of his new home to install a shelter in the basement.

Characteristics and Price

Despite the fact that there are different models on the market, the majority of those installed in Catalonia are built in the basement of homes or chalets, in new construction, and in the yards when the house is already built. They have a minimum area of 25 square meters with a capacity of 15 or 20 persons--in case of emergency, there would be 1 square meter per person--although there are also many with an area of 50 square meters.

The cost of the smallest varies between 1.5 million pesetas for those that are fitted into the structure of the home or that are planned for a new home, and 3 or 4 million pesetas in case they are built in the yard.

The entrance into these private shelters, similar to that of a submarine, consists of an enormous reinforced concrete door weighing 1.5 tons that opens into reception room equipped with showers and sanitary facilities which operates as a decontamination area.

Viewed from within, this type of shelter does not differ at all from a living room in a normal house; in fact, many of them are used on a daily basis as another room in the house. Nevertheless, it has very special features: it is a dwelling made of reinforced concrete, the walls of which are half a meter thick and capable of withstanding a 10-kiloton explosion--similar to that of Hiroshima--700 meters from the impact point. In addition, it has an electric-generating unit, purifying filters--for radioactive, chemical, and bacteriologic contamination--ad an emergency exit which leads to an area free from debris, activated only from the inside.

Institutional Indecision

In addition to special equipment--rubber suits, oxygen masks, radioactivity measuring devices, etcetera--its owners have to provision a small pantry which always has to be maintained over a recommendable minimum--15 kilos of food per person: 2 kilos of rice, 2 kilos of sugar, 2 liters of oil, and the remainder canned goods, biscuits, and nonperishable food; separately, 2 liters of water per person per day. All of this would cover a stay inside of 2 weeks, which is the period of time that the experts consider critical.

Up to the present time, there is no plan for the construction of large nuclear fallout shelters on the part of institutions. This means that there is not a single hospital bed protected against this type of disaster. Neither have provisions been made for protection in nuclear fallout shelters for firemen or civil defense personnel, who are the ones who would have to alleviate the consequences of a nuclear explosion. Nor has the protection of cultural and artistic treasures been considered, unlike other Western countries.

"What is incomprehensible," asserted Antonio Alcahud, "is that 15 million pesetas are spent on the construction of a story without taking into consideration providing a shelter, something that would only involve an additional expenditure of 100,000 pesetas per apartment."

8711/9312
CSO: 3548/1

MILITARY SPAIN

NEW DEFENSE CYCLE REPORTEDLY PLANNED

Madrid EL PAIS in Spanish 12 Sep 86 p 20

[Excerpt] Madrid--The National Defense Board met yesterday under the chairmanship of King Don Juan Carlos and agreed to initiate a new defense policy cycle based on the circumstance that the Spanish defense position has changed in recent years, as witness the progressive incorporation of Spain into NATO, the scheduled reduction of the U.S. military in Spain, and the implementation of drastic material and personnel modernization programs in the three branches of the armed forces.

The previous defense cycle concluded last year with the approval of the Joint Strategic Plan (PEC), a document describing the hypothetical threats to national security and the appropriate means by which to meet them. Now, with the start of a new legislature, the government plans to begin another cycle which, as in the previous case, will pursue a greater commitment by all ministerial departments in their contributions to national defense, over and above concrete military implications.

8711/9312
CSO: 3548/1

MILITARY SPAIN

BRIEFS

FALLOUT SHELTERS SAID LACKING--In the majority of the Western countries, in addition to the single-family, private shelters, the state is building collective nuclear fallout shelters. Meanwhile, in Spain it is estimated that there are some 200 private shelters with a capacity of 7,000 persons--these figures can vary substantially depending on the discretion of their owners--and only the large centers of power have this type of installation. The Zarzuela Palace and La Moncloa have their own shelters, while the Armed Forces have protected spaces below the Cibeles Fountain in Madrid, in Yebenes, and in the Toledo Woods. In our country there is only one large collective shelter, built 3 years ago in the parking garage of a hotel in Talevera de la Reina with a capacity of 400 persons. Although, in the realm of anecdotes, there is the quaint countersigning Tolerant Independent Party that has asked a specialized company for an estimate for the construction of a shelter that in addition to floating could withstand a direct hit. [Excerpts] [Barcelona LA VANGUARDIA in Spanish 4 Sep 86 p 23] 8711/9312

CSO: 3548/1

ENERGY SPAIN

EFFECT OF ENERGY PLAN ON CONSUMPTION, ENERGY SOURCES ANALYZED

Madrid MERCADO in Spanish 5 Sep 86 pp 42-45

[Text] Between 1982 and 1986 many important energy-related decisions were made which are affecting Spain's economy. The administration, refineries, and electricity companies all worked to the point of exhaustion, and produced some spectacular results: two protocols for the electricity sector, one for the refining sector, one extremely difficult struggle resulting in the most radical reconversions ever done in Spain--in the electrical sector--and signs of another, no less profound in its impact, in the petroleum sector. Strangely enough, it was the socialists who moved from a macroeconomic energy concept, in which the data handled by the administration began and ended with the growth of electricity demand and crude imports, to another more microeconomic concept (a business-oriented view, through which the energy officials immersed themselves in businesses' financial and cash flow analyses). A cynic might say that this is actually the most important energy change! Now it will have to be confirmed by the successors of Martin Gallego and Carmen Mestre, a pair that has without any doubt made history at the ministry of industry and energy.

There are other changes that are easier to measure, which are summarized in the first graph [not included]. During the past 4 years, under the National Energy Plan which was approved in 1983, there has been a major adjustment process, whose fundamental objective, hammered in relentlessly by the IPEN, is the reduction of Spain's dependence on petroleum. Along with this objective, held since the Magana era at the ministry of industry, during the past 4 years there have also been attempts to revive natural gas on a massive scale, and another attempt to bring nuclear energy back to the preeminent position it should have--in an administration which had declared a nuclear moratorium--but this is a real effort, as we shall see later.

Less Petroleum

The result of these efforts is somewhat mixed. The data available indicate that the reduction of petroleum imports has continued, but at a slower pace than what was done under the previous administration. For example, petroleum's rate of decrease in final energy consumption was 7.5 percent in 1981 and 2.3 percent in 1982. In 1983 petroleum's share rose by 0.4 percent, while the following year there was zero growth. In 1984 and 1985 there were modest reductions (0.7 and 1 percent, respectively). Similar results were obtained from an analysis of petroleum's share of primary energy consumption. It declined by 7.3 percent in 1981 and 4.4 percent in 1982. The socialist administration achieved a 6.4 percent rate of reduction in 1984, but in the following years it slowed down again, with reductions of only 2.7 and 2 percent, respectively.

These figures are significant only as they demonstrate the persistence of the objective of reducing our dependence on petroleum. The slowdown is due to two combined factors. The more important of these factors is that the replacement of oil in electricity-generating plants had been almost totally completed by 1984. In addition, the decline in crude prices in 1985 somewhat slackened Spain's industry's efforts to cut back its consumption of petroleum and petroleum byproducts. It is assumed that from now on, further reductions in petroleum dependence will become more expensive, but the desire to reduce crude imports will persist. In reality, this is the only key point of any energy policy.

Gas Expansion

The other major obsession of Spain's recent energy policy has been the expansion of reliance on natural gas in Spain. At the start of the current legislature, the need to provide markets for the huge amount of natural gas purchased from Algeria and Libya forced Spain to seriously seek a commercial expansion of this fuel. The first steps were taken with the renegotiation of the contract with Algeria and the obtaining of more accessible prices, at least in the European line, given the worsened situation of the leading firm in this sector, ENAGAS. The stakes are high: this involves creating a market by 1992 for 50 billion therms (at present the total demand barely comes to 17 billion therms) with total investments of 168.125 billion pesetas. The invasion of gas will work to the detriment of Butano, a company which will also be involved with some major investments (3.5 billion pesetas). The continuation of the investment and marketing plans

indicates that these projects are being carried out, according to sources from the ministry of industry, and that this program has much to do with the economic resurrection of ENAGAS.

The Electric Labyrinth

The administration's "arm's length" intervention in the electrical companies first ran up against a misunderstanding and afterwards met with a certain amount of resistance. The misunderstanding was of an economic nature. The PEN [National Energy Plan] 83 revised downward the forecasts for the growth of electricity demand for the period covered by the plan (up to 1988). It had been assumed that the electricity companies would continue planning for sustained economic growth, and therefore, would expect a growing and abundant electricity demand. The PEN maintained precisely the contrary, and set a tentative demand growth figure of 13.3 percent.

This is where the misunderstanding arose, strongly stimulated by the electricity companies. The idea of the authors of the PEN (the same pair mentioned earlier) was that electricity demand would continue to rise, but at a declining rate during the next 4 years. So during the first years high demand rates would persist, and little by little they would begin dropping until they reached an average growth rate for the entire period of 3.3 percent. The companies understood, or claimed to understand, that a growth rate of 3.3 percent was being set for each and every one of the years covered by the plan.

When examined carefully, the PEN forecasts are being met with rather striking exactitude. In 1983 electricity demand grew by 5 percent, dropped slightly in 1984, and in 1985 came close to the 3.3 percent growth target (according to the ministry of industry, for continental Spain), 3.5 percent according to UNESA, and 3.7 percent according to the ministry of the economy. This year's brief revision of the PEN maintains this objective, which would, among other things, allow part of the nuclear program which has been halted to be revived.

The third key point of Spain's energy policy seems to be more of an almost accidental consequence. Nuclear energy, despite the moratorium which the government has imposed, is already the nation's third-ranked energy source. Its importance has definitely surpassed that of hydroelectric power. In 1980 nuclear energy accounted for 1.6 percent of primary energy consumption and was fifth in magnitude among five possible energy sources. Now, 6 years later, it represents 11.3 percent of Spain's

primary energy (estimate for this year provided by the general department of energy) and it is now the third in importance, following petroleum (51.7 percent) and coal (24.7 percent).

Declining Prices

During these 4 years energy pricing policies have tried to maintain consistence despite institutional resistance to more flexible policies. For almost the first time in the history of gasoline prices, these prices have declined, responding with a certain amount of promptness to the cost of crude in the marketplace. Unfortunately, no formula was developed to automate the cost of crude-prices of byproducts ratio, due to the finance ministry's interest in keeping a substantial part of this petroleum windfall for its own coffers. Nonetheless, when controls are totally lifted from the fuels market, such an automated ratio will come into being.

The problem of electricity rates is more complex. The traditional formula of accumulating inflationary projections year after year had to be adjusted in order to take other factors into account, fundamentally factors related to improving the economic health of businesses in this sector. The system of prices and penalties instituted during the last 4-year period guaranteed that consumers would not be paying, via electricity rates, for the inefficient operations of businesses. That will always be an excellent policy.

This situation, along with some other problems, was diagnosed in 1983 and still remains unresolved. Except for the efforts of some businesses to reduce their financing costs in a rational manner, the electricity companies today are approximately just where they were in 1983.

7679
CSO: 3548/4

ENERGY SWEDEN

SCHOLAR CRITICIZES UNIVERSITY REPORT ON NUCLEAR ENERGY

Stockholm DAGENS NYHETER in Swedish 22 Sep 86 p 5

[Op ed article by Professor Olof Eriksson: "Lost in the Energy Jungle"; first paragraph is DAGENS NYHETER introduction]

[Text] An information pamphlet on Chernobyl, published by Uppsala University, is supposedly objective but actually defends nuclear power. The report was financed by the Swedish State Power Board and is being distributed with the hearty approval of nuclear power interests. Tear up the report! Universities are too important a source of knowledge for doubt to be created with regard to their independence, according to Professor Olof Eriksson of the Coordinating Board of the Swedish Research Council. In his view Uppsala University is spreading misleading information about nuclear power.

In the mounting flood of reprocessed, rearranged, target group-adapted and anonymous information in the information society, it is increasingly difficult for ordinary citizens to find information that is well-founded and reliable. The universities' expanded obligation to provide the general public with information should be one source of supply. Responsibility and sources should be quite clear, objectivity should be great and freedom from strong partisan interests should be more or less guaranteed.

But this would require the university world to develop a revised system of information ethics. Among other things researchers must tell us when they are speaking or writing as experts in a certain field (about which they have a great deal of knowledge) and when they are doing so as ordinary citizens with a right to have opinions about all possible issues (of which the individual researcher does not necessarily know any more than anyone else just because he or she is a researcher). In view of the halo of authority that surrounds universities and their research scientists, information from this source could otherwise be seriously misleading.

These reflections were occasioned by a pamphlet entitled "Chernobyl in Perspective." It was published by Uppsala University. In the foreword the president underlines the importance of basing energy policy on facts. The researchers responsible for the report, Sven Kullander and Borje Larsson, have 25 years of work in the field of radiation and the effects of radiation

behind them. This provides a basis for writing about radiation with clarity and conciseness on approximately 20 of the report's 32 pages. Their message is that all in all Chernobyl will cause a negligible increase in the cancer risks we Swedes live with.

On pages 10-19, however, they are arguing as fellow citizens. They have a perfect right to have opinions about anything they please. But they seriously violate the requirement that they inform us when they are switching roles. Without giving any indication of what they are doing, they switch in this interposed section to writing about matters that lie far outside their professional field. Their statements are full of indistinct and obscure elements. Some are directly erroneous. Others are very controversial, although the authors do not indicate this at all.

The starting point for this feature of the topical debate is reasonable as far as it goes. There are two particularly grave threats to our world. Acid rain and long-term climatic change as a result of man's extensive use of fossil fuels is one, nuclear war is the other. The authors' conclusion is that a plan for survival is needed. Most of us are probably prepared to agree with them. The question is what the plan should consist of in concrete terms.

On their way from this starting point to their conclusion, Kullander and Larsson quietly shift from a global to a Swedish perspective. This is done via a picture of an enormous mountain of coal as high as the Eiffel Tower and capable of releasing incredible amounts of carbon dioxide into the atmosphere. The reader is told that the pile represents approximately the total annual energy consumption in Sweden and he is then asked to consider whether it is more expedient to phase out fossil fuel or nuclear power.

Of course the nuclear power advocates often try to scare people with the "coal specter," usually in the form of rows of coal-fired power plants that will replace nuclear power. But without blinking an eyelash the two Uppsala research scientists hit us with a pile of coal that corresponds to total energy consumption. In their zeal they exaggerate the pile to the point where it corresponds to almost 2 years of energy consumption. Of course they never come right out and say that Swedish energy policy is aimed at this kind of coal consumption. But their intention to promote this very impression can scarcely be misunderstood. Their own conclusion is also clear. Phasing out nuclear power should be delayed for an indefinite period of time. First we must eliminate the use of coal and oil. And that reduces their general statement that nuclear power should be phased out to meaningless words. The concrete content of their argument indicates support for the continued use of nuclear power in Sweden.

In reality we reduced the consumption of fossil fuels by around 30 percent between 1973 and 1985. The policy that has been laid out means that this share will be further reduced. Coal has had and will continue to have an insignificant role. Coal-fired power plants (the coal specter in many contexts) with their low degree of efficiency and correspondingly high emission of carbon dioxide, etc., are something Riksdag intends to avoid at almost

any price. And that will be true even when nuclear power is phased out. There is no scientific basis for claiming that the energy policy goal of both reducing the coal and oil used and phasing out nuclear power is impossible. And I think Kullander and Larsson would also have realized this if they had done a little original research in the field of energy policy instead of listening to the "ghost stories."

After this little excursion into Swedish conditions Kullander and Larsson return to the global situation. Now they discuss the connection between nuclear power and nuclear weapons. For many of us who want to eliminate nuclear power, a major motive is the support it lends to nuclear arms development. This involves the spreading of expertise as well as the financing of a partially shared infrastructure in the form of mines, processing plants, etc. A series of articles in NY TEKNIK some time ago showed how this occurs in Sweden. In France they are now testing a reactor of the Chernobyl type that will produce plutonium for modernizing nuclear weapons. Not even the Swedish Academy of Engineering Sciences [IVA], which has staked so much of its reputation on its uncritical support of nuclear power, has the nerve to deny this connection now.

Kullander and Larsson dismiss this as a myth and, somewhat amazingly, make a reverse link. Their idea is that if we eliminate nuclear power in the world we will create an energy shortage, heightened political tensions and thus an increased risk of nuclear war. Suddenly nuclear power becomes a peace dove. Therefore it should be retained, not just in Sweden but in the whole world, at least for the foreseeable future.

Now nuclear power takes care of only around 3 percent of the world's energy needs. If it is to have any major impact on reducing carbon dioxide emissions or on peace in their own warped perspective, while we are waiting for the development of alternative technologies Kullander and Larsson foresee, it will have to be expanded colossally. Otherwise the Kullander-Larsson argument is left hanging in mid-air. And this would make a strong contribution to the general dissemination of nuclear technology and fissile material. That would be like fighting fire with fire. The plan for survival could turn into a suicide plan.

We know from our own experience that the power industry does not put any emphasis on developing alternatives as long as it has any hope of continuing with nuclear power. Therefore if we want to speed up the development of alternatives we should step up our own decision to phase out nuclear power and work to induce other countries to follow our example. That will do the most good for both peace and the environment.

Nuclear power is in trouble. Many of us had our doubts reinforced by what happened at Chernobyl. Information of the kind provided by Kullander and Larsson to the applause of the nuclear power interests (the report is being distributed gratis at IVA's big radiation symposium this week) certainly won't help to dispel them. The unscientific tone of the debate portion of the report also rubs off on the interpretation of what they have to say in their own area of competence. Our confidence in the research information

part of the pamphlet is shaken. The conclusion of the researchers that the effects of Chernobyl are generally negligible does not seem as believable as it did when we first read it.

In this particular instance it is part of the picture that the State Power Board helped to finance the pamphlet although this fact is not mentioned at all. This raises further questions. Should a state agency that is a central resource in implementing the elimination of nuclear power finance and distribute a pamphlet that argues in favor of canceling the decision to put a definite time limit on this process? Of course the answer is no. Getting rid of the time limit is just the first step in the strategy the nuclear power interests are employing to cancel the whole decision to end the use of nuclear power.

Therefore the State Power Board should tear up its 50,000 copies of the report. Otherwise the board runs the risk of quickly forfeiting the confidence it has begun to inspire even among the "eliminaters." Uppsala University should do the same thing. And in addition start an internal discussion on its policy on information ethics so that what has happened can be reduced to an occupational accident. Our universities are too important a source of general knowledge for there to be any doubt about their dedication to openness and independence when they distribute information to the public.

6578
CSO: 3650/4

END